

## Nepean Blue Mountains Family Obesity Service

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### **Nepean Family Obesity Service (NFOS) Submission to the Select Committee into the Obesity Epidemic in Australia, July 2018**

#### **a. Introduction**

The Nepean Blue Mountains Family Obesity Service (NFOS) is Australia's first public, whole of lifespan, multidisciplinary, tertiary obesity service. It was established in late 2016 to support individuals and families to achieve better health outcomes when faced with the challenges of obesity. The team of specialists include endocrinologists, a nurse/diabetes educator, midwives, dietitians, clinical psychologists, physiotherapists and administrative staff.

NFOS is located at Nepean Hospital in Sydney's west, home to a population with some of the highest rates of chronic health conditions, including obesity and diabetes, in New South Wales. Within the Nepean Blue Mountains Local Health District (NBM LHD) and Local Government Area (LGA) are the suburbs of Penrith and Lithgow, which have Social-Economic Index For Area (SEIFA), or ratings for disadvantage, that indicate levels of most disadvantage in our state. Social and economic disadvantage are closely linked to poorer diets, less exercise and addiction to alcohol, smoking and drugs, resulting in greater risk of developing chronic diseases and poorer health outcomes overall (Wilkinson and Marmot, 2003).

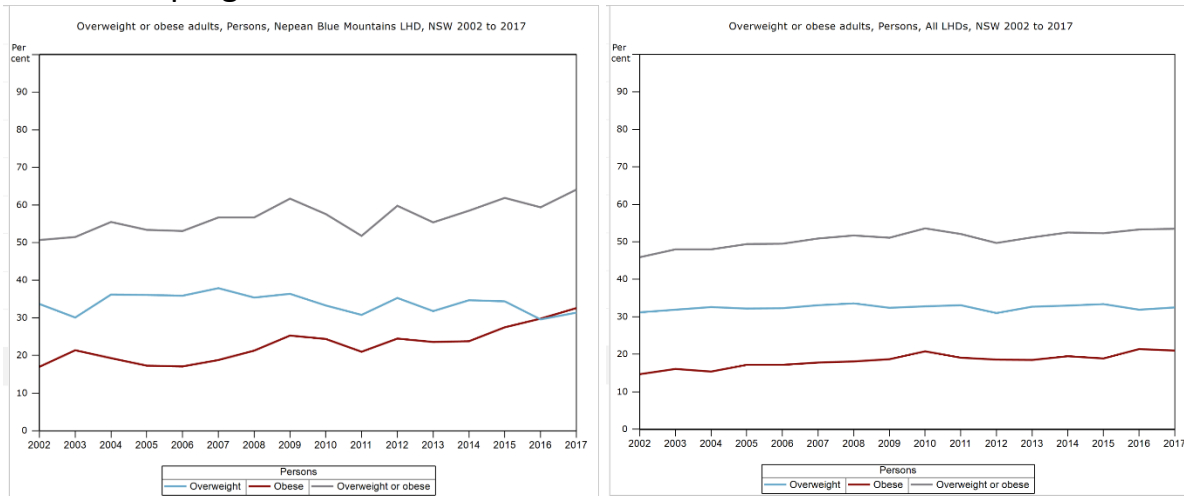
NFOS is uniquely positioned to inform the Select Committee on the Obesity Epidemic in Australia, especially in the highly affected NBM region. In this submission we will highlight the specific needs of the community that we service to provide a more individual view of obesity and its effects on the families living with it.

#### **b. Rates of overweight and obesity in the NBM Region**

##### Adults

Data from Healthstats NSW reports overweight and obesity rates state-wide at 53.5%, while they were higher at 64.1% in the NBM LHD (32.6% obese, 31.4% overweight), in 2017. Moreover, there was a significant increase in obesity rates between 2016-2017 in the NBM LHD and obesity rates exceeded overweight rates for the first time in 2017 ([http://www.healthstats.nsw.gov.au/Indicator/beh\\_bmi\\_age/beh\\_bmi\\_lhn\\_trend](http://www.healthstats.nsw.gov.au/Indicator/beh_bmi_age/beh_bmi_lhn_trend), accessed 30<sup>th</sup> June 2016). These trends were not reflected in state-wide data over the same period (see figures below). This emphasises the increase in severity, not just

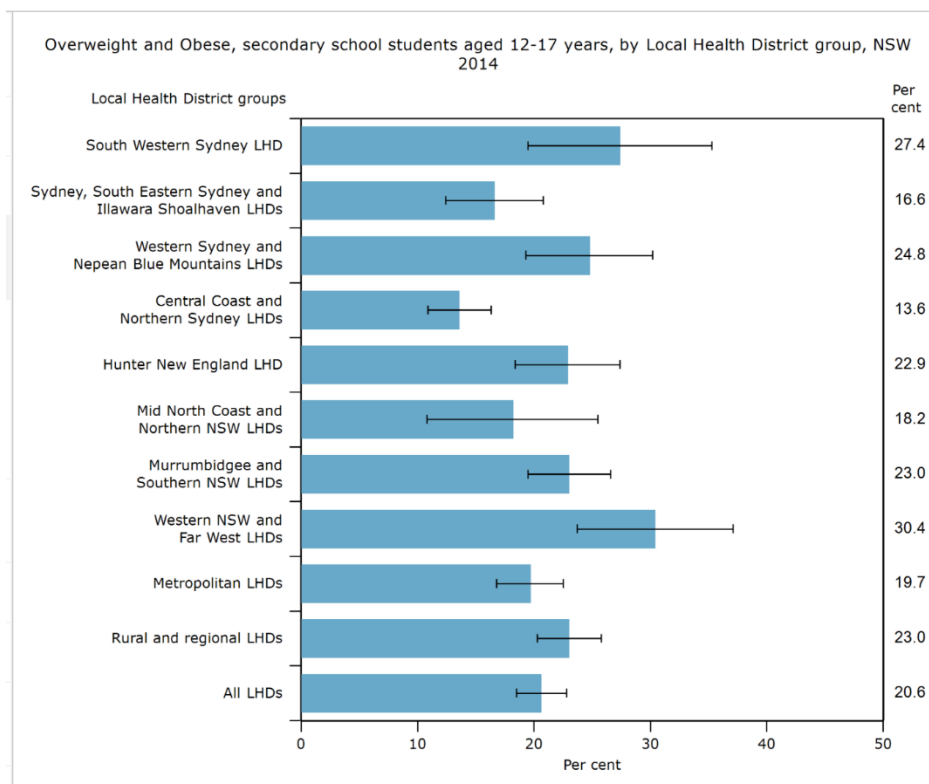
prevalence, of obesity that we are seeing in our LHD, including in children, young adults and pregnant women.



[http://www.healthstats.nsw.gov.au/Indicator/beh\\_bmi\\_age/beh\\_bmi\\_lhn\\_trend](http://www.healthstats.nsw.gov.au/Indicator/beh_bmi_age/beh_bmi_lhn_trend), accessed 30<sup>th</sup> June 2018

### Children and Adolescents

The NBM region has one of the highest levels of childhood overweight and obesity in Australia. Data from the Centre for Epidemiology and Evidence, NSW Ministry of Health indicate that prevalence of overweight and obesity in secondary school students in Western Sydney and Nepean Blue Mountains LHDs was 24.8% in 2014. The rate of overweight and obesity across the state was 20.6% in the same year.



[http://www.healthstats.nsw.gov.au/Indicator/beh\\_bmi\\_secstud/beh\\_bmi\\_secstud\\_lhn\\_snap](http://www.healthstats.nsw.gov.au/Indicator/beh_bmi_secstud/beh_bmi_secstud_lhn_snap), accessed 30<sup>th</sup> June

Our team deals with the sad reality of extreme obesity daily. The typical paediatric patient engaging with our tertiary service tends to live a stressful life. One or both parents of this child are obese, often living on minimal incomes, and have high stress and/or medical co-morbidities. Children suffer psychological illness due to bullying and weight stigma and feel excluded from school and peer interactions. These children can also have multiple medical conditions including diabetes, sleep disorders and joint and mobility limitations. Diagnoses such as autism spectrum disorder, Attention Deficit Hyperactivity Disorder and Oppositional Defiance Disorder are common and many are on medications for these, with problematic side effects.

**c. Contributors to the rise in overweight and obesity in Australia – obesity is NOT a personal choice**

Overall Comments

There is no single contributor to the rise of overweight and obesity in Australia, which is being paralleled elsewhere around the world to varying degrees. An ‘obesogenic environment’ is a major factor, however, the effects of this are seen in some more than others, particularly in those living with higher levels of social disadvantage. The NBM area has pockets of severe economic disadvantage which contributes to higher rates of overweight and obesity and poorer health. The *Nepean Blue Mountains PHN 2016-17 Needs Assessment* based upon data from 2011 and 2013, outlines a snapshot of the adult population in the region

([https://www.nbmphn.com.au/getattachment/About/Plans-Reports/130\\_0217-Needs-Assessment-A4\\_FINAL\\_WEB/130\\_0217-Needs-Assessment-A4\\_FINAL\\_WEB.pdf.aspx](https://www.nbmphn.com.au/getattachment/About/Plans-Reports/130_0217-Needs-Assessment-A4_FINAL_WEB/130_0217-Needs-Assessment-A4_FINAL_WEB.pdf.aspx), accessed 20<sup>th</sup> June 2018) :

- 5.7% of the population were one parent families
- 9.4% of population had a weekly income of less than \$500
- 31.9% had year 10 as their highest school education level
- 5.7% consumed the recommended fruit and vegetable servings
- 9.7% of adults had expressed very high levels of psychological distress

The weight of a child strongly tracks with that of their parents in a dose dependent manner through a variety of mechanisms (i.e. two parents affected by obesity convey more risk to the child than one of two). As children get older, they are increasingly influenced by their peers. Thus, given high rates of overweight and obesity in the NBM LHD, this problem is likely to increase in magnitude and become the accepted ‘norm’, with the negative effects that this can bring to the area. These effects include poor health (both physical and mental) and low overall quality of life for the local population, and a major burden for the local economy. This alone would be an argument for targeted efforts in our expanding region.

### Specific Factors: the Environment

In general society, and even in medical circles, obesity is often viewed as a personal choice made by an affected individual, with the individual having the power to change their weight status and improve overall health if they really wanted to. This ignores the high prevalence of this generally undesirable condition in the population and fails to recognise the overwhelming influence of the environment in shaping a person's health and wellbeing. Workplaces, schools, supermarkets and food outlets, (lack of) green spaces, neighbourhood characteristics, particularly the degree of sense of community, and transport all influence quality of life, energy balance and, ultimately, health. As such, the government and other corporate stakeholders have a major role to play in shaping the health of the nation into the future.

### Specific Factors: Changes in Society Structure, Normalisation of Processed Foods

Obesity rates in Australia started to increase in the early eighties. Several factors are likely to have had an influence at this time:

- Women entered the workforce in larger numbers and therefore the role of food preparation and provision was outsourced.
- The food industry boomed, with minimal governmental regulation. This included an explosion in fast food venues and takeaways, easily prepared supermarket meals (processed, frozen, packaged) and reliance on manufacturers to provide adequate nutrition. Sweetened beverages were promoted as fun and enjoyable and accessible within our homes through the advent of home-carbonated cordials.
- Meal times became fragmented. Families no longer ate together at the table. Eating in front of the television or on the run, usually high calorie easy meals and snacks, became commonplace.
- Portion sizes of meals and discretionary foods and beverages became larger. The food industry capitalised on key determinants of food choice - taste and large servings by adding salt, fat and sugars to our food in large amounts.
- Households had greater access to cars and convenience appliances.

These changes cumulated in the normalisation of the obesogenic lifestyle that is seen embedded into Australian Culture today.

### Specific Factors: The Greater Sydney Commission Western Parkland City - a Mecca for Golden Arches and Cars?

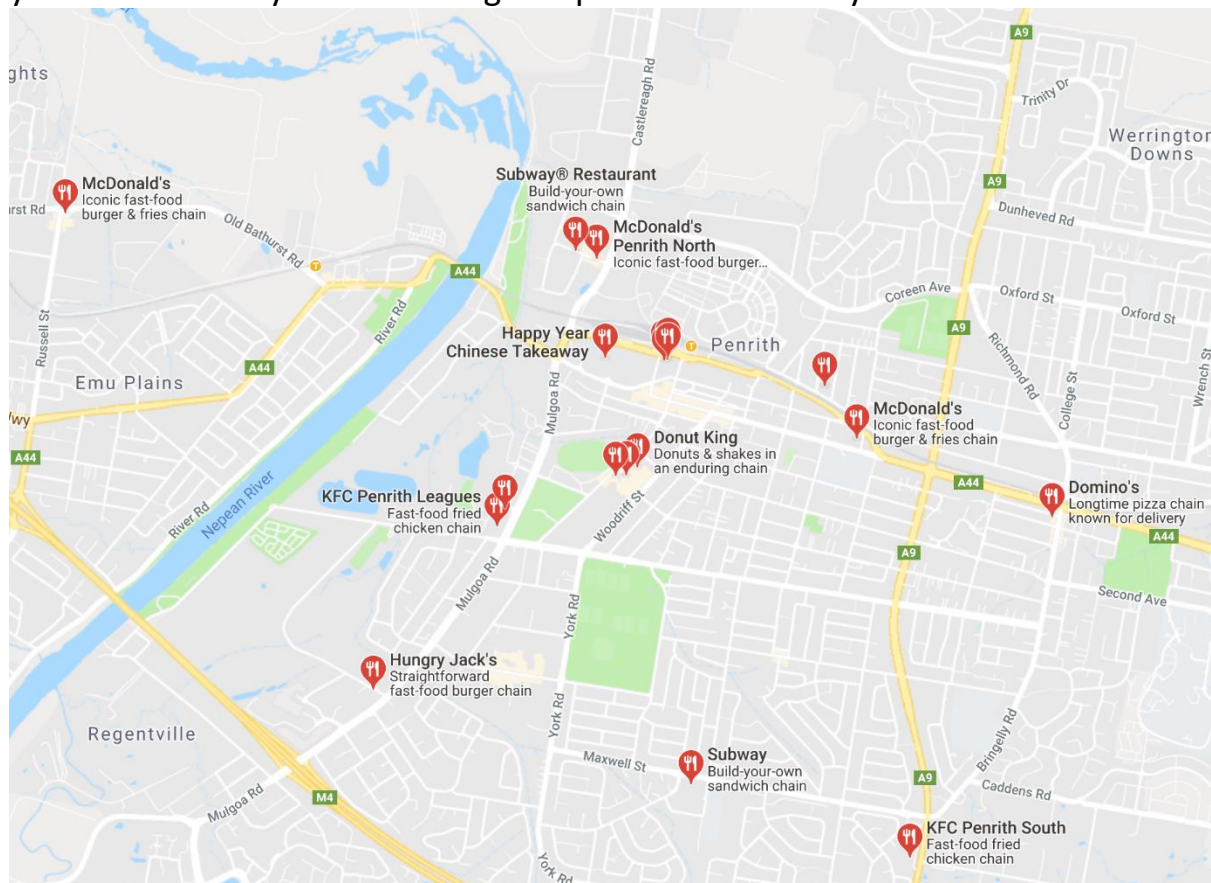
People living in outer suburbs of cities are at greater risk of obesity. This is presumably due to a greater reliance on cars, with minimal access to public transport and longer commute times, and a lower likelihood of access to a central community space (<http://www.abc.net.au/news/2017-03-07/urban-sprawl-contributing-to-obesity-problem-study-suggests/8331548>, accessed 29<sup>th</sup> June 2018). People living in these

areas are less likely to include incidental walking in their day due to distances needed to travel.



Picture taken 22<sup>nd</sup> May 2018 from a car of a motorway construction site along the A9 in Penrith – using road signs to advertise fast food.

The density of take-away food outlets in one small strip of Penrith is jaw dropping to any outsider, although clearly quite normal to any long-term resident of Penrith (see map below). This plethora of fast food outlets can all be accessed from the comfort of your vehicle. They also have large carparks to allow easy access.



Fast food outlets in Penrith/Kingswood area

[https://www.google.com/search?client=safari&rls=en&q=map+of+fast+food+outlets+penrith&npsic=0&rflfq=1&rlha=0&rllag=-33753175,150700999,632&tbm=lcl&ved=0ahUKEwi1v4LY-vrbAhXDp5QKHTH6DycQtgMILA&tbs=lrf:!2m1!1e2!2m1!1e3!3sIAE,lf:1,lf\\_ui:9&rldoc=1#rflf=hd;:si;:mv:!1m3!1d19003.646464525504!2d150.68780335!3d-33.7606605!2m3!1f0!2f0!3f0!3m2!1i844!2i550!4f13.1;tbs:lrf:!2m1!1e2!2m1!1e3!3sIAE,lf:1,lf\\_ui:9](https://www.google.com/search?client=safari&rls=en&q=map+of+fast+food+outlets+penrith&npsic=0&rflfq=1&rlha=0&rllag=-33753175,150700999,632&tbm=lcl&ved=0ahUKEwi1v4LY-vrbAhXDp5QKHTH6DycQtgMILA&tbs=lrf:!2m1!1e2!2m1!1e3!3sIAE,lf:1,lf_ui:9&rldoc=1#rflf=hd;:si;:mv:!1m3!1d19003.646464525504!2d150.68780335!3d-33.7606605!2m3!1f0!2f0!3f0!3m2!1i844!2i550!4f13.1;tbs:lrf:!2m1!1e2!2m1!1e3!3sIAE,lf:1,lf_ui:9), accessed 30<sup>th</sup> June 2018)

Our area had the first Krispy Kreme doughnut outlet in Australia. The Mayor of Penrith, Greg Davies, commented at the time when asked about whether it was a good idea for this outlet to open up in an area with so much obesity: 'People get killed on the roads in cars, that doesn't mean we [are] going to stop any car plants from opening up. I mean, obviously if you work within the guidelines that dieticians give, work within the rules, you shouldn't have a problem.'

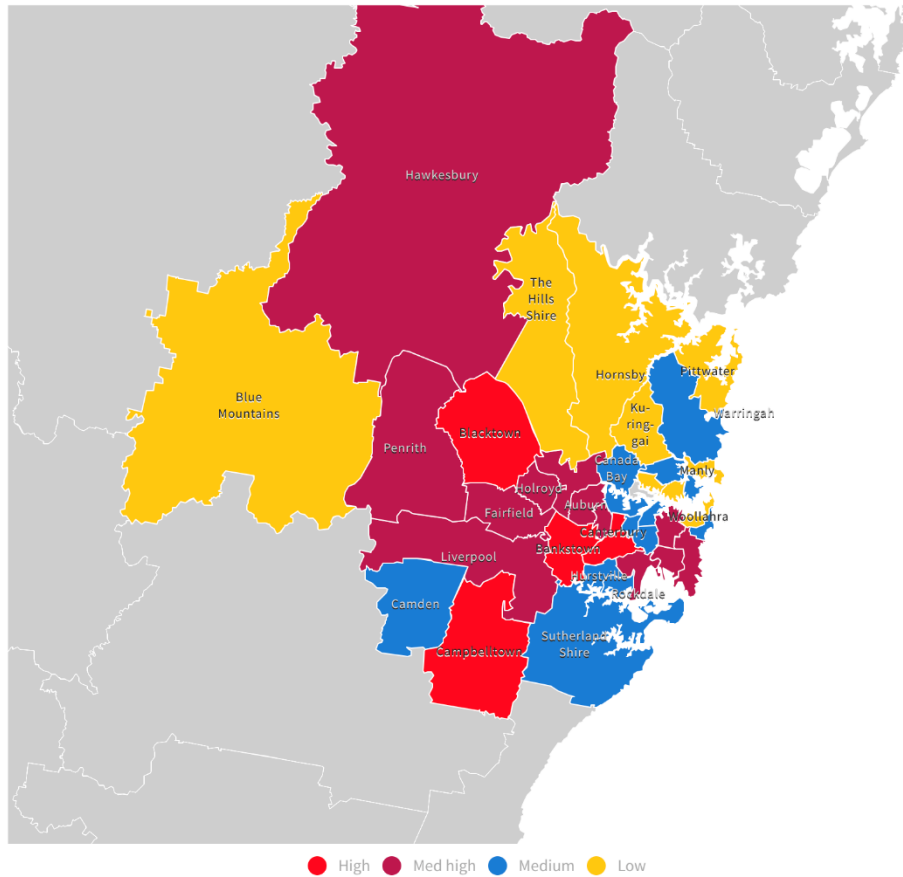
(<http://www.abc.net.au/worldtoday/content/2003/s883808.htm>, accessed 29<sup>th</sup> June 2018). This is a good example of the lack of knowledge that exists, even at the level of the government, who are responsible for making decisions about our local environment.

#### The Blue Mountains Community – an Exception to the Rule

Interestingly, within the NBM LHD there is one area, the Blue Mountains, that has bucked the regional trend for fast food. Public demand and resident action in the mid 1990's forced the Mountains City Council to heavily regulate the opening of fast food restaurants in this area. This, coupled with higher SEIFA scores and better transport accessibility in a direct train line to the city, has resulted in less obesity, but also fewer complications resulting from obesity, including type 2 diabetes (see figure below). This inequality in health, socioeconomic standards and environmental pressures within the same Nepean Blue Mountains region is both interesting and concerning and warrants further study.

## Type II diabetes rates across Sydney

Hospitalisations caused by type II diabetes  
(per 100,000 population)



Source: NSW Health

<https://www.smh.com.au/healthcare/why-sydneys-urban-sprawl-is-making-us-sick-committee-of-sydney-report-reveals-20170119-gtuems.html>, accessed 30<sup>th</sup> June 2018

### d. The effectiveness of existing policies and programs introduced by the Australian government to prevent obesity

Existing policies and programs are doing very little to curb the increasing trend of obesity. How can they when they are fighting against the normalisation of energy dense foods and beverages within society and the environmental and economic disparities that exist across Australia?

There are many dedicated healthcare workers who are trying to address childhood obesity in the NBM area through quality government run programs. However, these programs do very little to tackle the overwhelming population need and fail to address the primary drivers for obesity, including the obesogenic environment in our LHD. Funding for nine Go4Fun programs annually in a region that is over 9,000 square kilometres with 350,000 people is clearly inadequate.

Laws and legislation at each level of government, community-based interventions and health promotion in the NBM area have failed these children. Ground up community consultation, including with local healthcare professionals and schools and families affected by obesity, is the only way to understand the causes of this local obesity epidemic and to address it with regional sensitivity.

Western Sydney is Australia's third largest economy (Briefing paper NSW Parliamentary Research Service

[https://www.parliament.nsw.gov.au/researchpapers/Documents/western-sydney-an-economic-profile\\_1/Western%20Sydney%20-%20an%20economic%20profile.pdf](https://www.parliament.nsw.gov.au/researchpapers/Documents/western-sydney-an-economic-profile_1/Western%20Sydney%20-%20an%20economic%20profile.pdf), accessed 20<sup>th</sup> June 2018). People in the West should enjoy the privileges afforded to those in city areas, including living environments conducive to health and wellbeing. However, this is not the case, as can be seen through poor health statistics, environmental and town planning issues, including urban sprawl, and inadequate infrastructure, including lack of fast public transport links. Until the various governments address these issues, the health of children living in the outskirts of Sydney will continue to lag behind those of their city cousins.

In our tertiary obesity service, children with extreme obesity and poor health, such as early diagnosis of type 2 diabetes mellitus, non-alcoholic fatty liver disease, joint and mobility problems, sleep disturbances, psychological distress and social isolation, projected to have premature mortality, are now our patient group. The regional disparities in adequacy of infrastructure, educational opportunities and health services has let them down in regard to providing the best future for them.

#### a. **Where to now?**

NFOS calls upon the Select Committee into the Obesity Epidemic in Australia to prioritise and address obesity, across the lifespan. Future activities to address obesity using a family and community based approach include:

#### Adequate Consultation

- I. Community engagement, including ground-up consultation with those affected by obesity (either personally or in a family member), children and adolescents and with educators and healthcare workers. This consultation should occur with those groups in isolation and in mixed forums and be based on the contributors and the solutions to obesity in the NBM area. This issue was explored by the Hudson Institute in 2018 in the paper entitled 'Why They Buy: Fighting Obesity Through Consumer Marketing Research' (<https://s3.amazonaws.com/media.hudson.org/files/publications/CardelloFINAL.pdfm>, accessed 30<sup>th</sup> June 2018). They recommended more BMI segmented research to make certain that 'regulators and the public health community...



reassess standard tactics and broaden their analytical “toolkit” to ensure more effective food policy across all BMI segments.’

- II. An investigation on the differences in social and environmental factors and healthcare provision between the Blue Mountains, Penrith and Hawkesbury regions which may contribute to different rates and severity (by BMI and co-morbidity) of obesity.

#### Laws, Regulations and Taxes

- I. Reduce the availability and thus normalisation of energy dense foods and beverages in Australian Culture:
  - Regulate the number of fast food and takeaway venues serving nutritionally poor food options.
  - Increase the number of venues serving healthier options. Increase access to market stalls and fresh produce.
  - Support the call for a sugar tax on Sugar Sweetened Beverages sold in Australia.
  - Call for transparent and easily understood food labelling. Self-regulation of the food industry is not working. Health Star Ratings are poorly understood and misleading concerning total energy content.
  - Encourage the packaged snacks/sweet baked goods and restaurant sectors to make commitments to lower calories, as recommended in the Hudson Institute report, 2018 (<https://s3.amazonaws.com/media.hudson.org/files/publications/CardelloFINAL.pdf> accessed 30th June 2018). In this report, “stealth” measures (e.g. removing calories without communicating the change; portion control) were identified as essential to achieving these goals.
  - Encourage major supermarket chains to make healthier options more accessible and avoid ‘specials’ on energy dense foods and beverages.
  - Adopt strategies for energy dense foods and beverages akin to those used in the highly effective anti-smoking campaign. This would include government advertising strategies to generate stigma around sugar sweetened beverages and ‘junk’ food. Regulated advertising and marketing of processed food and drink to children and teenagers does not go far enough in our opinion.
- II. Ensure development in Western Sydney proceeds in a fashion that promotes stronger communities. An example of how this might be done is explained in a description from the Victorian Planning Authority for two suburbs in Western Melbourne:

‘They will be characterised by large open spaces, the beautiful Kororoit Creek and well-designed bicycle networks. Every effort has been made to weave in the natural features of the landscape into the development plans, ensuring native grasslands are protected and indigenous plants will flourish throughout. *Future*

*residents will have unprecedented access to conservation areas and parks, including a proposed Kororoit regional park.*

The suburbs are expected to accommodate almost 20,000 dwellings and 14,000 jobs, with a total of 10 schools to be built within them..... At 30km from the CBD, the new suburbs will be closer to central Melbourne than many established areas and *linked to the CBD via Caroline Springs Station – due to open in 2017.* The topography of the suburbs includes undulating rocky land, waterholes, ponds and rocky outcrops near the Kororoit Creek, which is home to animals such as the Growling Grass Frog. *Residents will also be serviced by a large town centre, which will be largely accessible on foot and bicycle along the former Beattys Road goldfields route, as well as by car and future bus transport along a new street network.* <https://vpa.vic.gov.au/two-grand-new-suburbs-planned-melbournes-west/> (accessed 30<sup>th</sup> June 2018)

- III. Support workplace agreements which promote flexible working arrangements, especially for parents, allowing shorter commute times and more time to shop and prepare meals at home and provide time for family-orientated physical activity.
- IV. Improve access to fast public transport to minimise time spent in cars. Research by the Australian Catholic University has found that ‘people who drive an hour or more a day are 2.3kg heavier and 1.5cm wider around the waist compared to people who spend 15 minutes or less in their cars’ [http://www.acu.edu.au/staff/our\\_university/newsroom/new\\_archive/hour\\_driving\\_a\\_day\\_hits\\_the\\_waistline\\_study](http://www.acu.edu.au/staff/our_university/newsroom/new_archive/hour_driving_a_day_hits_the_waistline_study) (Accessed 30th June 2018)

#### Education and Health Promotion

- I. Engage and consult with people living with obesity to develop targeted strategies that would be effective in prevention and treatment of overweight and obesity.
- II. Increase long term funding and scope (including opt-out participation in schools) of Healthy Children’s Initiatives such as Go4Fun for maximum uptake.
- III. Educate children from a young age:
  - Ensure thorough understanding of advertising and marketing overall, particularly in relation to the food industry
  - Teach reading and interpreting of food labels
  - Implement mandatory classes in shopping, menu planning, food budgeting and cooking
  - Ensure physical activity is part of everyday school life
  - Ensure students are aware of the recommendations around screen time and teach them to switch them off after a certain amount of time

- IV. School canteens in all schools, not just government schools, need to abide by the Nutrition in Schools Policy. Canteens must provide only nutritious foods and drinks. Resources could be produced that help canteens to produce healthy and affordable items made on site.
- V. Provide classes to help students manage stress and to help them identify when they are eating due to stress
- VI. Support parents to manage children with behavioural problems. This may include government run initiatives or subsidised access to strategies such as the Triple P program (<https://www.triplep-parenting.net.au/au-uken/triple-p/>, accessed 30<sup>th</sup> June 2018). Ensure timely access to the NDIS for parents of children who qualify for this to minimise stress that, in our experience, can be associated with weight gain in parents and children.

#### Services to Treat Those Already Living with Obesity

- I. Improve funding for tertiary obesity services that include multidisciplinary teams of experts working in easily accessible, bariatric-friendly facilities, with access to single and group spaces, demonstration kitchens and gyms. These services should operate with a lifespan focus and have access to all effective therapies, including pharmacotherapies and bariatric surgery. They should have ready access to respiratory, including sleep laboratories, cardiology and mental health expertise. They should have funding for education of other healthcare professionals and other stakeholders (e.g. schools/government officials). They should also have a primary role for obesity advocacy in the community and in policy development at local, state and federal levels.
- II. Patients in the community should have access to a Chronic Care Plan for obesity alone. This would enable General Practitioners to co-manage their patients with appropriate allied health specialists, including dietitians, clinical psychologists and physiotherapists/exercise physiologists. Community nurses and other home supports should also be available for those who cannot leave their homes due to obesity.
- III. A diversion of funding for research into obesity, including its prevention and effective management, rather than the diseases that arise from it, is strongly recommended.

#### **b. Final comments**

The Nepean Family Obesity Service is grateful for the opportunity to provide a submission on this important issue. We would welcome any opportunity to engage with the Select Committee on any matters related to obesity or on the health needs of Western Sydney across the lifespan, with a focus on the NBM LHD.

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