

# WAR ON DIABETES

## Where Are We Now?

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Minister for Health Mr Gan Kim Yong declared a “War on Diabetes” in his budget speech in parliament on 13 April 2016. To declare war on a chronic disease is remarkable because it has not been done before. As I had written in the May 2017 edition of *SMA News* (<http://bit.ly/2LshIZx>), the US had previously declared war on drugs and war on cancer, with similar declarations in other healthcare systems against tuberculosis (an infectious disease) and tobacco (a carcinogen).

These other “wars” tend to be agent- or disease-specific. Diabetes, on the other hand, is an invisible disease with multifactorial causes and is thus difficult for patients and the

public to visualise and understand. Compared to pictures of a heroin-filled syringe, an ulcerating tumour, a lit cigarette or an infective microbe, diabetes is an abstract illness.

The factors that can lead to diabetes include genetic predisposition, diet and lifestyle. These are notoriously difficult issues to manage especially in the perspective of population health. Take for example, dietary factors and the problem of sugar and carbohydrates. The public has long been aware that sweetened soft drinks are high in sugar and therefore bad for health, but recent attention has shifted to the role of refined carbohydrates in the diet,

such as that in white rice and white bread. These refined carbohydrates have a high glycaemic index, which means that they are rapidly absorbed into the blood stream and could cause sugar spikes associated with the development of diabetes. Singaporeans typically consume a few portions of white rice a day; it's a cultural heritage that has been passed down the generations.

Changing such deeply ingrained habits is no doubt a challenging task. In 2016, the Health Promotion Board (HPB) highlighted white rice as a concern in the fight against diabetes, which was reported in our local press.<sup>1</sup> A follow up story seemed to suggest that this led to some alarm in the community, reporting that targeting white rice "has created a storm of protest from rice lovers".<sup>2</sup>

### An urgent problem

Minister Gan reported in his 2016 budget speech that about 400,000 Singaporeans are diabetic and the lifetime risk of developing diabetes is 30%. Of the Singaporeans who have diabetes, one in three has not been diagnosed. And among those diagnosed, one in three has poor control of the condition. Additionally, we hold the unfortunate distinction of having

one of the world's highest rates of lower extremity amputations. There are projections that estimate that close to one million Singaporeans may suffer from diabetes by 2050. Singapore's diabetes prevalence rate (10.5%) is higher than those in Japan (5.7%), Finland (6.0%), Taiwan (8.4%) and Hong Kong (8.0%).<sup>3</sup>

The Diabetes Prevention and Care Taskforce is a high-level inter-ministerial committee that was set up in June 2016 to spearhead efforts to address diabetes in three key areas: healthy living and prevention, screening and follow-up, and disease management.

You would recall that Prime Minister (PM) Lee Hsien Loong, during his National Day Rally on 20 August 2017, singled out diabetes as one of three key long-term issues for Singapore. This underscores the importance of diabetes in a whole-of-nation effort to tackle the disease and further emphasises the urgency and seriousness of the problem.

### Key initiatives thus far

#### Early screening

Early screening is a key initiative of particular relevance to primary care doctors who are the points of first patient contact. It is

necessary because diabetes onset is insidious and asymptomatic at the early stages. Patients may not volunteer themselves for early screening especially if there is no incentive to do so.

GPs will by now be familiar with the enhanced Screen for Life (SFL) programme that was rolled out by HPB on 1 September 2017.

This programme enables eligible Singaporeans to screen for five conditions: hypertension, hyperlipidaemia, diabetes mellitus, cervical cancer and colorectal cancer. HPB has sent letters to the patients' homes and recommended a visit to a nearby participating clinic for health screening. These active reminder letters help to create awareness and encourage at-risk individuals to go for screening tests early at a highly subsidised rate, before the onset of symptoms.

However, diabetes screening under SFL applies only to individuals aged 40 years and above. For those below this cut-off age, screening should be considered at an earlier age if other risk factors are present, such as obesity and a family history of diabetes.

In response to this, HPB has also rolled out the Diabetes Risk Assessment (DRA) tool for those aged 18 to 39 years old. The tool comprises a set of five questions including the respondent's age, gender, height and weight, BMI, family history of diabetes and history of hypertension. Based on the information, the online tool tabulates the risk level for diabetes. Singaporeans found to be at risk of diabetes through the tool can enjoy the same subsidised rate of S\$5 for diabetes screening and one follow-up consultation at the participating GP clinic.

#### Encouraging exercise

The National Steps Challenge is another initiative by HPB to leverage





on the smartphone and wearable technology to encourage Singaporeans to be more physically active. Fitness trackers measure the number of steps taken and reward the wearer when they reach certain defined physical activity milestones. Participants are encouraged to walk at least 10,000 steps a day and stand to redeem shopping and grocery vouchers. The third season of the challenge that concluded in April 2018 reached out to more than 690,000 individuals.

### Preventing diabetes

The Taskforce has been exploring measures to reduce sugar in sugar-sweetened beverages. PM Lee mentioned in his National Day Rally that some countries impose a sugar tax in a bid to reduce the intake of dietary sugar. Other measures being considered include warning labels and advertising restrictions. This route may be a bit hard for consumers to swallow, but it certainly goes to show how far perceptions toward sugar have shifted – it is as if sugar has become the “new tobacco”. The Taskforce is also negotiating with industry players to



dial down the percentage of sugar in sweetened drinks. Channel NewsAsia reported that seven major soft drink manufacturers have agreed to reduce the sugar content in all their drinks in Singapore to 12% and below by 2020.<sup>4</sup>

Another way to change habits is to provide drinking water freely across the country. Public consultation and feedback has called for a “drink plain water” campaign. The feedback panel asked for more water coolers to be installed in public areas, such as within community centres. Minister Gan announced in June 2018 that plain water will be provided at all Government and People’s Association functions. Drinking points will also eventually be made available freely in public areas, such as hawker centres, parks and even bus stops.

### Healthier food choices

The Ministry of Education and HPB have been running the Healthy Meals in Schools Programme since 2011, serving healthier meals with less fat, sugar and salt, with a serving of fruit in schools. The Taskforce has extended this concept to demonstrate a whole-of-Government commitment, by implementing the Healthier Catering Policy (April 2017) and Healthier Drinks Policy (November 2017) as the default in Government premises and at Government-organised events. Under the policy, caterers must provide wholegrains and plain water, use healthier oils for all food preparation and limit the number of deep-fried items per order. Lower-sugar drinks will also be the default in government premises, while freshly prepared hot coffee and tea must be served with no added sugar. You will notice that sugar and syrups are now provided as a side option.

The range of Healthier Choice Symbol (HCS) products has seen an increase in recent years. This distinctive red pyramid symbol stamped on

packaged food products indicates that they are the healthier options to help consumers to make informed choices during grocery shopping.

Food products awarded the HCS are generally lower in fat, saturated fat and/or trans fat, lower in sodium, lower in sugar, higher in calcium and higher in dietary fibre. The number of such products has grown steadily from an initial 300 in 2001 to 2,500 across 70 food categories today. ♦

### References

1. *The Straits Times*. Hooked on white rice, but some ready to change diet. 6 May 2016. Available at: <http://bit.ly/2Jz01FX>.
2. *The Straits Times*. Fighting diabetes: Why the target is white rice. 12 May 2016. Available at: <http://bit.ly/2uHl6L>.
3. International Diabetes Federation. Age-adjusted prevalence (20 – 79 years) estimates for 2015. In: *IDF Diabetes Atlas 7th Edition (2015)*.
4. Channel NewsAsia. 7 major soft drinks manufacturers in Singapore to reduce sugar content in drinks. 22 Aug 2017. Available at: <http://bit.ly/2NYmWxR>.



### Legend

1. All freshly prepared drinks are now served with no added sugar at hospital canteens
2. Drinks with the Healthier Choice Symbol, with some containing no sugar