

Nudging Our Way To A Singapore With Less Childhood Obesity

Ryan Lee | 21 June 2023

INTRODUCTION

Obesity is a global health issue that doesn't affect only certain countries. While Singapore does have a lower obesity rate than many western countries,¹ 10.5% of adults are obese as of 2020, which is an increase from 8.6% in 2017.² Crucially, *childhood obesity* is on the rise, increasing from 13% to 16% during the same time period,³ which serves as signs of danger to come because obese children are five times more likely to become obese adults.⁴

The Health Promotion Board (HPB) is the primary agency tasked with implementing Obesity Prevention Policies that aim to encourage the public to make healthier behavioural changes, with the ultimate goal to completely avoid anyone becoming obese in the first place.⁵ These Obesity Prevention Policies lie on a scale of Nudges to Shoves, and a delicate balance must be maintained to ensure that these policies are effective but not too heavy-handed.

¹ "Ranking (% Obesity by Country)." World Obesity Federation Global Obesity Observatory. Accessed June 5, 2023.

<https://data.worldobesity.org/rankings/>.

² "Open Singapore." Obesity OPEN, March 15, 2023.

<https://obesityopen.org/open-singapore/>.

³ Ibid.

⁴ Simmonds, M., A. Llewellyn, C. G. Owen, and N. Woolcott, "Predicting Adult Obesity from Childhood Obesity: A Systematic Review and Meta-Analysis." *Obesity Reviews* 17, no. 2 (2015): 95–107, <https://doi.org/10.1111/obr.12334>.

⁵ Foo, L. L., K. Vijaya, R. A. Sloan, and A. Ling, "Obesity Prevention and Management: Singapore's Experience." *Obesity Reviews* 14 (2013): 106–13. <https://doi.org/10.1111/obr.12092>.

CAUSES AND EFFECTS OF CHILDHOOD OBESITY

Primary Causes of Childhood Obesity

There are numerous factors that cause childhood obesity, chief amongst them is an *obesogenic environment*, which refers to "the collective physical, economic, policy, social and cultural factors that promote obesity".⁶ For instance, having a high number of fast food restaurants near your home may result in your area being an obesogenic environment. This Policy Explainer will focus specifically on poor dietary habits as one element resulting in an obesogenic environment, as these habits lead to children consuming unhealthy foods and becoming obese as a result.

Negative Implications of Childhood Obesity on a Societal Level

But why should we avoid obesity? Firstly, obesity is a serious medical condition that is clearly defined, with the criteria for being obese being to have a Body-Mass Index (BMI) of over 30.0.⁷ This definition is objective in nature, and goes beyond simply labelling someone "fat". Instead there are real consequences to the individual such as:

⁶ Swinburn, Boyd, Garry Egger, and Fezeela Raza, "Dissecting Obesogenic Environments: The Development and Application of a Framework for Identifying and Prioritizing Environmental Interventions for Obesity." *Preventive Medicine* 29, no. 6 (1999): 563–70. <https://doi.org/10.1006/pmed.1999.0585>.

⁷ "Obesity." World Health Organization, Accessed June 5, 2023, <https://www.who.int/health-topics/obesity/>.

- **Physical Health Issues:** Obesity is linked to a variety of health issues such as high blood pressure, high cholesterol levels, ultimately causing increased chances of stroke or heart disease.⁸
- **Mental Health Issues:** Obesity is linked with mental health issues such as depression and anxiety.⁹ Obese people are often ostracised by their peers, and the social stigma may cause further mental health issues as they struggle to fit into society.
- **Financial Problems:** Caused by the health issues described above, obese people may be absent from work due to stigma or medical issues, and may thus lose out on wages needed to live a fruitful life.¹⁰

Given the scale of negative effects, HPB is pursuing Childhood Obesity Prevention Policy in the form of nudges and shoves to encourage children to have good dietary habits.

POLICY MECHANISM: NUDGES & SHOVS

Childhood Obesity Prevention Policy

The old saying “Prevention is better than Cure” remains true in the context of obesity, with research showing that it is much easier to prevent people from becoming obese than to treat those who are already obese. With this knowledge, HPB targets changes to behaviour upstream, aiming to intervene early to correct poor dietary habits before a person becomes obese. While there are many methods of addressing childhood obesity, one of the primary methods

⁸ “Obesity: Health Consequences of Being Overweight.” World Health Organization, Accessed June 5, 2023, <https://www.who.int/news-room/questions-and-answers/item/obesity-health-consequences-of-being-overweight>.

⁹ Sarwer, David B., and Heather M. Polonsky, “The Psychosocial Burden of Obesity.” *Endocrinology and Metabolism Clinics of North America* 45, no. 3 (2016): 677–88, <https://doi.org/10.1016/j.ecl.2016.04.016>.

¹⁰ Schmier, Jordana K, Mechelle L Jones, and Michael T Schmier, “Cost of Obesity in the Workplace.” *Scandinavian Journal of Work, Environment & Health* 32, no. 1 (2006): 5–11, <https://doi.org/10.5271/sjweh.970>.

employed by HPB is in the form of nudging and shoving individuals towards adopting healthy eating habits.

Nudges and Shoves

Behavioural Economics is the “science of behaviour”, and *Nudges* and *Shoves* are the means by which we can encourage people to change their behaviour. Nudges are gentle guidance, aimed at making “good choices” more appealing and “bad choices” less appealing, with the aim of making it more likely for people to make good choices and avoid bad choices.¹¹ Meanwhile, shoves are a more direct intervention, aimed at completely preventing the public from choosing bad choices, making it impossible for people to choose the bad choice.¹²

As you may guess, Behaviour Economics is a very powerful tool to use, therefore, policy needs to be aligned closely with moral principles that are at the core of any interventions aimed to change behaviour. In line with this, Nudges and Shoves should always be used to encourage people to choose choices that benefit them in some way, while preserving the ability for people to freely make decisions.

POLICY DESCRIPTION: NUDGES & SHOVS IN ACTION

Target Audiences

Childhood Obesity Prevention Policy aims to nudge and shove behaviour of three main target audiences.

- **Parents:** Parents are the heads of households, who control the spending of money and which food to buy. Hence, they are the key decisionmakers when it comes to what food their children will have access to and have a strong role in determining whether children have healthy dietary habits or not.

¹¹ “What’s Better, a Nudge or a Shove?” The Behavioural Insights Team, Accessed June 5, 2023, <https://www.bi.team/blogs/whats-better-a-nudge-or-a-shove/>.

¹² Ibid.

- Schools: Children spend half their days in school, often eating their breakfast and lunch at school. A school environment that encourages healthy eating will allow children to develop good eating habits.
- Children themselves: Ultimately, the person that does the eating makes the final decision about what food is eaten. Growing children form eating habits from a young age and often carry these eating habits into adulthood.

HPB has launched many policies targeted at all relevant stakeholders (including those not listed above) that are situated at different points on the Nudge/Shove scale. I will be highlighting three specific policies, one targeted for each of the identified audiences above that best illustrate the concept of nudges and shoves.

Parents: Healthier Choice Symbols (Nudge)

Nutritional Facts Labels (the nutrition information printed in black-and-white on the back of food packaging) is complex, containing many numbers with different meanings, making it difficult for parents to know what foods are considered healthy or unhealthy. HPB's Healthier Choice Symbols aim to address this issue as they are clear, and easily identifiable,¹³ making it easy for parents to know what foods are healthy at a glance. Food manufacturers are able to apply for their new products to undergo a review by HPB to determine whether they deserve the Healthier Choice Symbol through HCS Online.¹⁴ This prevents any manipulation by food manufacturers who may try to find any loopholes in the guidelines set by HPB, providing HPB with the opportunity to close these loopholes through updating their guidelines during the review process of products. The ultimate effect is where unhealthy products are unable to “sneak through the cracks”, and HPB has strong control over what products are able to receive a Healthier Choice Symbol.

¹³ “Healthier Choice Symbol.” Health Promotion Board, Accessed June 5, 2023, <https://hpb.gov.sg/food-beverage/healthier-choice-symbol>.

¹⁴ Ibid.

A further evolution of Healthier Choice Symbols is the NutriGrade Drink Labels rates beverages on a scale of “A to D”,¹⁵ providing a more nuanced understanding of nutritional value, and making it easier for parents to compare beverages.

Through providing clear information about which food products are healthy, labelled very prominently on the front of food products, parents are nudged to buy these products labelled with Healthier Choice Symbols. With a simplified grocery shopping experience for parents, parents can more easily find and buy healthier foods, thus providing their children with healthier foods which sets healthy eating diets for children to prevent Childhood Obesity.

Schools: Healthy Meals in Schools Programme (Shove)

Through the Healthy Meals in Schools Programme,¹⁶ HPB makes sure that canteen vendors are only able to serve healthier foods, banning the sale of unhealthy foods from being sold in schools. HPB provides resources and guidance to ease canteen vendors into adapting their products, which includes measures such as providing a list of Healthy Food Suppliers, and listing a specific selection of beverages allowed for sale in schools.¹⁷ These resources make it easy for canteen vendors and school administrators to adjust their current measures to align with the guidelines. The Healthy Meals in Schools Programme makes it so that students are unable to access unhealthy foods during their recess and lunch breaks. Instead, students are guaranteed at least two healthy and balanced meals a day, and will have less exposure to unhealthy meals, making it less likely that they will develop unhealthy dietary habits.

¹⁵ “Measures for Nutri-Grade Beverages.” Health Promotion Board, Accessed June 5, 2023, <https://hpb.gov.sg/healthy-living/food-beverage/nutri-grade>.

¹⁶ “Healthy Meals in Schools Programme.” Health Promotion Board, Accessed June 5, 2023, <https://hpb.gov.sg/schools/school-programmes/healthy-meals-in-schools-programme>.

¹⁷ Ibid.

Children: Regulating Food Advertising Commercials (Nudge & Shove)

The media has a huge role in controlling what sorts of food cravings we have. This is particularly so for children who are more affected by food advertising than adults.¹⁸ Understanding this, the Advertising Standards Authority of Singapore has set out a Children’s Code with Guidelines for Food Advertising to Children to limit “children’s exposure to advertising of food and beverages high in fat, sugar and salt”.¹⁹ This can be seen as both a nudge and a shove because there are many possible methods of regulating advertising. A Nudge approach might provide more airtime for healthy products, while reducing airtime for unhealthy products. A Shove approach might completely ban unhealthy products from having any advertisements, thus making it virtually impossible for children to be exposed to these products and crave to eat them.

NUDGES & SHOVES: DO THEY WORK?

Evaluating Nudges in General

Nudges preserve consumer freedom at their core, as they only encourage good choices, but do not completely prevent bad choices. No one likes to feel like they have their actions controlled by someone else, and nudges help to preserve the freedom for people to make “bad choices” if they want to.

However, with this freedom also comes the possibility for the public to ignore nudges and continue making bad choices, so nudges may be ineffective at encouraging behaviour change. Healthier Choice Symbols may be ignored, and parents can continue buying unhealthy foods for their children. This is often the case when parents have their own unhealthy dietary habits, or already have brand loyalty to certain brands that produce unhealthy products. Gentle nudges are

¹⁸ Folkvord, Frans, Doeschka J Anschütz, Emma Boyland, Bridget Kelly, and Moniek Buijzen, “Food Advertising and Eating Behavior in Children.” *Current Opinion in Behavioral Sciences* 9 (2016): 26–31, <https://doi.org/10.1016/j.cobeha.2015.11.016>.

¹⁹ “Childrens’ Code.” Advertising Standards Authority of Singapore, Accessed June 5, 2023, <https://asas.org.sg/About/Childrens-Code>.

unlikely to change the behaviour of these groups of parents, thus their children are likely to continue having unhealthy dietary habits even with the implementation of Healthier Choice Symbols.

There may also be cases where gentle nudges are inappropriate and more extreme measures may be necessary, particularly in cases where companies engage in predatory behaviour and take advantage of the public. For instance, companies may make use of the fact that customers do not understand food science and market products to appear healthy when they are definitely not. Examples include fruit-flavoured soda being labelled with “100% Natural Flavours” and including an image of a fruit on the label.²⁰ In cases where it seems like food producers are themselves nudging customers to buy their products, it may seem like having the government counter with yet another nudge is insufficient. Instead, shoving them away from these products by banning the use of false claims or inappropriate uses of the term “healthy” may be necessary.

Evaluating Shoves in General

Shoves are extremely effective in correcting behaviour. By making something impossible or illegal, the vast majority of people are unlikely to continue doing that thing. If we completely prevent the sale of unhealthy food, it follows that people will lead healthier lifestyles simply because they are unable to access these unhealthy foods.

However, shoves are often unpopular decisions as they are seen as too heavy-handed, and may lead to backlash in the form of *reactance* behaviour.²¹ In cases where food marketing was heavily regulated, such that there were frequent public service announcements about the negative effects of unhealthy foods, it was found that

²⁰ “Unhealthy Foods Marketed as ‘Healthy.’” Public Health Advocacy Institute, June 8, 2016, <https://www.phaionline.org/center-for-public-health-litigation/key-issues/marketing-unhealthy-foods/>.

²¹ Osman, Magda, “Backfiring, Reactance, Boomerang, Spillovers, and Rebound Effects: Can We Learn Anything from Examples Where Nudges Do the Opposite of What They Intended?” *Psychological Archive (PsyArXiv)*, 2020, <https://doi.org/10.31234/osf.io/ae756>.

there was an increase in the desire for unhealthy foods.²² This suggests that certain interventions, such as the mandate for negative messaging for unhealthy foods cause reactance behaviour, with the opposite of the intended behaviour change happening instead. Great care needs to be taken by policymakers to ensure shoves are used sparingly to change behaviour to avoid backlash and reactance behaviour that leads to more consumption of unhealthy foods by children.

CONCLUSION

Ultimately, nudges and shoves need to be used strategically to ensure it is both effective, while preserving autonomy. HPB has pursued a middle ground approach that carefully uses a combination of nudges and shoves to encourage healthy eating behaviour amongst children, while shoving them away from the effects of predatory behaviour. Encouraging behaviour change to reduce childhood obesity is a complex process which can only be done through careful management of nudges and shoves to create a less-obese Singapore of the future.

This Policy Explainer was written by members of MAJU. MAJU is an independent, youth-led organisation that focuses on engaging Singaporean youths in a long-term research process to guide them in jointly formulating policy ideas of their own.

By sharing our unique youth perspectives, MAJU hopes to contribute to the policymaking discourse and future of Singapore.

²² Pham, Nguyen, Naomi Mandel, and Andrea C. Morales, “Messages from the Food Police: How Food-Related Warnings Backfire among Dieters.” *Journal of the Association for Consumer Research* 1, no. 1 (2016): 175–90, <https://doi.org/10.1086/684394>.

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