



WEIGHING OUR HEALTH

The Mother of All Diseases



Malaysia is the Fattest Nation in South East Asia

Source: The Lancet

GLOBESITY

It is estimated that 1 in 4 individual is overweight globally.

In Malaysia, the figure is 1 in 2.

Source: The National Health and Morbidity Survey 2019

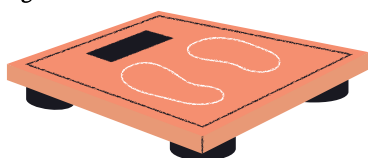
Malaysians:

30.4%

Overweight

19.7%

Obese



Source: The National Health and Morbidity Survey 2019

OVERWEIGHT AND OBESITY

By Kok Shew Yen, Student Dietitian

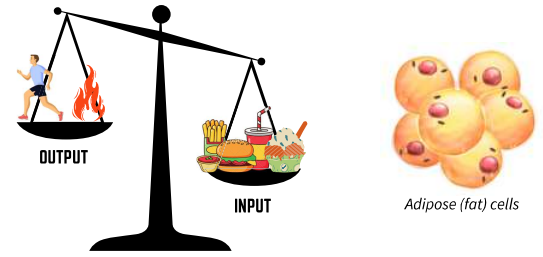
While COVID-19 is entering endemic phase, overweight and obesity has been declared a global epidemic. [5] With the number of overweight and obesity cases flourishing since the 1970s, it has become a public health concern as overweight and obesity increases the risk of non-communicable diseases (NCDs) such as cardiovascular diseases, cancer and diabetes, leading to an increase in premature deaths globally. This has earned overweight and obesity the nickname, "The Mother of All Diseases".

HISTORY OF OBESITY

The ability to store body fat was an adaptive survival mechanism of human evolution as food was scarce during the hunter and gatherer days. Natural selection favoured those whose genotype allowed for the ability to store body fat, passing on this trait to the next generation. However, the emergence of obesity became evident during the Industrialisation era when foods like meat and cheese became more accessible and affordable to the Middle Class, prompting an over-indulgence in food. Industrialisation also brought along machines and steam engine, leading to a decrease in hard, physical labour, contributing to the overall increase in physical inactivity.



Having a big or chubby appearance does not necessarily indicate overweight or obesity. Overweight or obesity is defined as abnormal or excessive fat accumulation that presents a risk to health, especially when the fat accumulate within the abdominal area, where the internal organs crucial to life reside. The cause of overweight and obesity is the imbalance of energy input and output. We are eating more than what our body needs. All the excess calories consumed will be converted into fat cells and is stored in the body.



Over the years, doctors and practitioners have used Body Mass Index (BMI) to identify overweightness or obesity as it is one of the quickest and easiest method. However, BMI is actually less accurate than we think. This is because different people have varying body sizes and compositions. BMI can be interpreted differently for growing children and ageing elderly, as well as across gender, race and muscularity. A study known as the YY-paradox (2004) discovered that two people of different race but with the same BMI had different adiposity (amount of body fat). The reasoning behind this may be due to the genetic factor as well as lifestyle habits that result in the differences in body composition and health risk. But, despite its shortcoming, BMI is still widely accepted as the primary method to classify body mass of all individuals.

BMI CLASSIFICATION		
	WHO(BMI)	ASIA-PACIFIC(BMI)
Underweight	<18.5	<18.5
Normal	18.5 - 24.9	18.5 - 22.9
Overweight	25 - 29.9	23 - 24.9
Obese	>29.9	>24.9

The WHO and Asia-Pacific BMI cut-off point. The discrepancy is attributed by the genetics, body composition and lifestyle contrast between Asians and Caucasians.

BMI is purely a classification system, further examination will need to be conducted to determine the best treatment and strategy to combat obesity.

Source: World Health Organisation

BREAKFAST

60 600 90 750 KCAL

x2 Roti Canai with Dhal gravy Teh C (sweetened condense milk & sugar)

LUNCH

530 70 55 140 190 985 KCAL

Chicken Rice with Egg Barley water x1 Kuih Ketayap x1 Kuih Seri Muka

TEA BREAK

140 140 130 410 KCAL

x2 Cucur Udang Cola

DINNER

390 370 100 80 890 KCAL

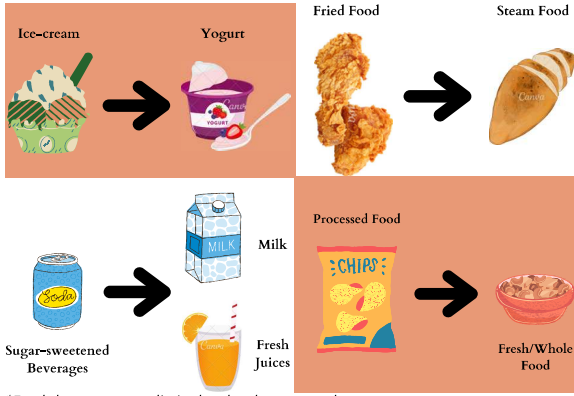
Nasi Briyani Chicken Curry with Yogurt 1/2 portion Vegetable Stew Lassi

Example of a 3000kcal diet

Overeating is a common scenario among the Malaysian population as Malaysia is known to be a 'Food Haven'. There are many kinds of energy dense food such as fried items and sugary pastries that taste delicious but do not carry much nutrients. The tendency to over-indulge in these delicacies are common and will lead to a surplus in energy consumption and build up of fat cells. Over time, as more and more fat is stored in the body, it will lead to overweightness, and if not addressed, obesity will follow.

Should we be afraid of obesity? The answer is 'Yes, we should'. Obesity is known as The Mother of All Diseases. This is because as our waist line increases, it will affect the functionality of our organs, disrupting homeostasis of the body and if left untreated in the long run, can lead to premature death. Apart from our dietary habits, the environment we live in is not designed to promote physical activity. The lack of public transportation has encouraged the use of private vehicle, the absence of bicycle lanes and proper walkways, vandalised park infrastructure affecting its usability. All these factors, in combination with the increase in food prices has made obesity prevalent and its solution more complex.

Does genetics come into play in the fight against obesity? Well, there is no clear answer. Studies have found a correlation between circulating hormones and food intake. One of the example is Leptin. Leptin is a hormone responsible for regulating food intake and body mass, and an imbalance in leptin may result in excessive food intake due to the feeling of constant hunger. For those individual with leptin imbalance, leptin therapy has been proven effective in reversing obesity. However, one solution does not fit all as obesity is more than just genetics. Genetics are not solely to be blamed. As said by Francis Collins, director of the National Institute of Health (NIH) of the United States (2009 - 2021); "Genetics loads the gun and the environment pulls the trigger." We may have the "fat gene" in us, but it is our diet and lifestyle choices that is the determinant of obesity. Behaviours such as having a liking for sweet and fried food which are calories dense as well as the mindset of "lazy to exercise" are the main factors contributing to the increased input of calories and a decreased output of energy. [4]

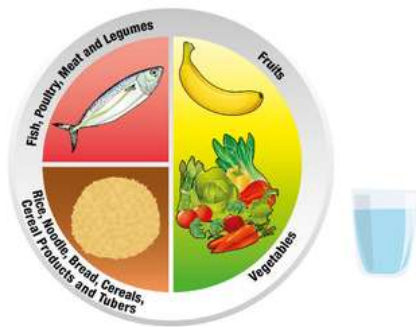


*Food changes are not limited to the above examples

How can we combat obesity? The most practical and effective way is to watch what we eat. We can all start by incorporating simple changes to the way we eat. One of the changes we can start practicing is called small food-based changes. This change is simple and it does not require a drastic switch. For example, we can swap the energy-dense and less nutritious ice-cream for a more nutritious and tasty natural-flavoured yogurt. With this small changes, we can have better control of the nutrients we put into our body. There are many calories-dense food such as potato chips, doughnuts, fast food, red meat, pastries and processed foods that taste great and are easy to come by. But, they may not be the best food option for our health. A simple rule to abide by is to choose fresh and whole foods as much as possible because the fresher the food, the lesser additives added and the more nutrient retained.

Another strategy to aid our fight against obesity is to exercise portion control. We all have a "tool" that can help us determine the amount of food we should eat, that is using our hand. A gradual reduction in the portion size is encouraged so as to not put our body through starvation. For instance, if you are eating 3 scoops of rice for dinner, try cutting it down to 2.5 scoops first. There is no "one-size fits all" solution when it comes to eating, but the rule of the thumb is to practice intuitive eating, while using the hand portion rule as the guide. Intuitive eating means that we should listen to our body for hunger and satiety cues. When we feel hungry, we should eat, but the amount of food can be determined by the hand portion rule.

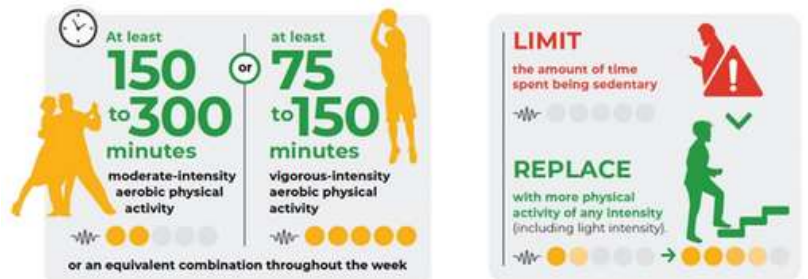
Hand portion rule as a guide to the portion size



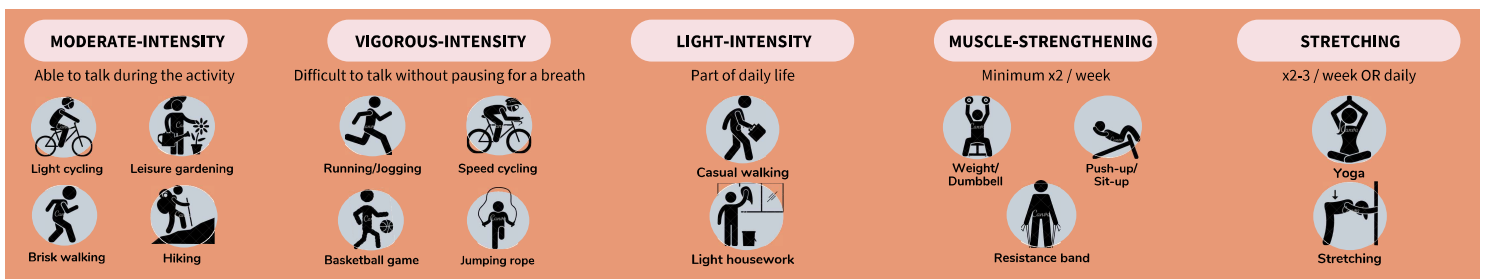
Suku-suku Separuh / Quarter-quarter Half by the Ministry of Health Malaysia

The Ministry of Health Malaysia recommends all Malaysian to follow the "quarter-quarter-half" rule when eating. A quarter portion of carbohydrate (rice, noodles), another quarter for protein (fish, chicken) and half portion of vegetables and fruits. According to the Malaysian Food Pyramid, we should be eating at least 3 servings of vegetables and 2 servings of fruits daily, of which many Malaysians adults do not achieve. This outcome can be attributed to the Malaysian food culture that places heavy emphasis on carbohydrate. A typical take-out meals mainly consist of carbohydrate and less vegetables, which does not meet the requirement of "quarter-quarter-half". So next time, when eating out, try to order more vegetables or ask the chef to give a bigger portion of vegetables. There are many benefit of eating vegetables and fruits which can have a positive outcome on our health.

Apart from the way we eat, we should also pay attention to exercise. Regular exercise have been associated with many health benefits that diet alone cannot achieve. The WHO recommend adults to exercise for at least 30 minutes per day, 5 days per week. We should also limit sedentary activities like sitting and laying down, apart from sleeping. For every chance we get, we should be active and move about to stretch our muscles and burn some calories. Some activity is better than none, so strive to be more active!



The WHO guidelines on physical activity and sedentary behaviour for adults



*Exercises are not limited to the above examples



Start by setting SMART Goals for yourself. [3] Unrealistic and unachievable goal may not be sustainable in the long run and may even lead to a rebound of the old habit. When setting a goal, we must be ready for it and persist through and not let the environment and society hinder us from achieving it. Know that you are not competing with anyone when you embark on this journey of wellness. Every one is different and what may work for someone else may not work for you. We must all find the solution that best fit our body, that means going through trial and error. Besides that we must all cherish our body the way it is. Self-acceptance and self-esteem are important to ensure success of this journey.

Start small, start now. Let us all pay more attention to our body through our diet. Starting small like swapping your favourite milk chocolate for dark chocolate can be a great way to minimise extra sugar. Instead of sitting on the couch and watching your favourite TV show, you can get up and do some walking in front of your TV to get in some extra steps. We need to find a comfortable balance in everything that we do. That is, if eliminating fried chicken from your diet is impossible then you need not force yourself to do it, you can start by reducing the number of times you eat it, 5 times per week to 3 times per week. If you are unable to find time to hit the gym or that you feel uncomfortable working out in a public area, you could buy an exercise mat and start doing simple exercises in the comfort of your home. Finding the right balance will make caring for our health feel like a habitual lifestyle and not burdensome, increasing the chance of success.

You do not need to look or feel overweight to start managing your diet. We can all start caring for ourselves through our diet anywhere anytime. The wise saying goes: Prevention is better than cure. So let us not wait till diseases and illnesses are knocking on our door, but start making the change now and you will feel great about yourself!

Specific

Measurable

Achievable

Relevant

Timed

DISCLAIMER:
The above newsletter is for general reading only and is not in any form professional advice or medical advice. Always seek professional advice from qualified healthcare providers for personalised and targeted dietary/medical intervention. Content written are of writer's own opinion unless otherwise stated.

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