## Cholesterol levels in americans vs singaporeans



## **Cholesterol Levels in Americans vs Singaporeans**

These days, people all around the world are more conscious about the importance of healthy living. This is probably due to the stigma that has been placed on obesity through mass media. On top of that, people are falling sick more often than before, and it is rather common that people witness their loved ones suffer after being diagnosed or pass away due to cardiovascular diseases or stroke. As a result, people are becoming more conscious of what they eat. They are watchful about their weights. Whenever we browse through our social media feeds, there is bound to be one of those people who will flaunt their detox regime, and also those who constantly show-off photographs of their meals, consisting just salads and cold pressed juices.

However, most of these "health-conscious" people are just concerned about the amounts of calories they are consuming each day, trying to avoid being overweight. They count their calorie-intake obsessively, believing that the lesser their calorie intake, the more healthy they are. Unfortunately, all these are just misconceptions that they have.

Everyone recognizes the role obesity has in increasing chances of developing chronic diseases, but not many realize the real culprit: low-density lipoprotein cholesterol (LDL-C). According to the Centers for Disease Control and Prevention (CDC) (" Cholesterol Fact"), people who have high LDL-C levels have double the risk of getting a cardiovascular disease than those with lower levels. This is because too much of these " bad" LDL cholesterol in

the blood can clog up the arteries. It certainly is a huge concern as cardiovascular disease is the leading cause of death in America.

Statistics from CDC shows that there were 71 million Americans with high cholesterol levels in 2008, accounting for 33. 5% of the American population. Out of this number, less than half actually receive treatment (" Cholesterol Fact"). In comparison, numbers from Singapore's Ministry of Health (MOH) shows that high cholesterol levels are present in 17. 4% of the Singaporean population (" Disease Burden"). This paper will attempt to understand why there is such a disparity in the cholesterol levels in Americans and Singaporeans, observing the different eating habits and healthcare measures in the two countries.

The first factor contributing to the high cholesterol levels in Americans would have to be the notoriously huge portion sizes that they consume during their meals. The perpetual increase in serving sizes could be due to the fact that players of the food industry compete against each other, aiming to attract customers with their more value for money meals. Portion sizes have ballooned so much that a regular hamburger is now 23% larger than it was twenty years ago (Rotelli). To illustrate, just a regular meal at Burger King in America inclusive of a Double Whopper with cheese, onion rings and a vanilla shake would amount to 2, 030 calories, slightly above the recommended average daily caloric-intake of 2, 000 calories (Barro). Just imagine how much calories that would be if they consume two such meal per day – almost 100% more than the recommended intake!

Being an Asian country, portions in Singapore are notably smaller. When one dines in a Chinese restaurant, dishes are often shared among the table and each person is given a small rice bowl and a small plate. Furthermore, most Asian parents teach their children that it is rude to leave food behind, and they would have to finish the food on their plates before asking for more. These practices prevent mindless eating, and forces one to only eat sufficiently.

Comparing caloric-intake, a regular packet of nasi lemak from a hawker center in Singapore has 494 calories, and can easily fill up an average adult for a meal (For). This amount is at least three times lesser than what an average American would consume for one meal. Seeing how the Americans overeat, it is no wonder that more people have higher cholesterol levels than Singaporeans.

Granted, calories are not the only answer to our question. In my opinion, what constitutes the meal plays a bigger role than the quantity.

In general, Americans eat too much red meat and not enough greens. Fruits and vegetables are important to our diet as they contain a lot of fiber that helps in reducing blood LDL-C levels (" Cholesterol: Top 5"). About 42% of Americans eat less than two servings of fruits and vegetables a day, that is less than half of the recommended amount which is two to five servings (Woolston). According to a grocery purchase report by the Economic Report Service, Americans overspend on refined grains, fats and sugars, yet not enough on wholesome food such as fruits, vegetables and whole grains. This is a cause of worry as it deviates too much from the health guidelines.

To make matters worse, America has well established itself as a "fast food nation", with an estimated number of 232, 000 fast food restaurants dotting the country (Fast Food). Americans are dependent on fast food because they are affordable, convenient, and tasty at the same time.

Today, about a quarter of the population patronize fast food chains everyday (Ransohoff). Even though there are healthier options being introduced by fast food chains, the unhealthy options are still dominating sales, as they are more appealing and usually cheaper. People would rather have a regular fried chicken than a grilled one. Most of the popular fast food items are deep fried, and accompanied with soft drinks and sauces like tartar and mayonnaise. These items are high in saturated fats, sodium and sugar, all of which contribute to high LDL-C levels.

On the other side of the world in Singapore, various types of cuisines have been introduced in recent years. There has been an influx of Western flavors in the form of fast food chains and restaurants, and young adults have recently begun hopping on the café-hopping wagon. In spite of this, 81% of Singaporeans say they would still choose local hawker food when eating out ("Food Forward").

Unfortunately, this does not mean that Singaporeans are spared from high cholesterol levels, as a sizable number, 67% of the population dine out at least once weekly ("Food Forward") and spending 62% of their total food expenditure on eating out ("Report"). Hawker centers are the number one place of choice to go for meals, as the stalls serve delicious yet efficient and affordable food. They are so-called the equivalent of American fast food in

Singapore and busy Singaporeans are very dependent on them because they save them the hassle of cooking. Instead of bringing lunchboxes to school or offices, they go to hawker centers to settle their meals.

The food in Singapore's hawker centers does not generally constitute much deep fried food and red meat, as American fast food. Even so, they are considered less healthy than wholesome home-cooked food. Hawker food dishes are mostly high in refined grains, having the largest portion of it in the form of white rice or noodles, as they are the staple for Singaporeans. Majority of the hawker dishes are either very greasy, such as fried carrot cake and chicken rice, or that they contain a lot of coconut milk, such as curries and laksa. All these hawker dishes containing a lot of saturated fat that also elevate cholesterol levels.

Soupy dishes might seem like a healthier choice, but they are actually loaded with high amounts of sodium due to the use of monosodium glutamate (MSG) or soy sauce. A bowl of fish ball noodles soup contains 2, 878 milligrams of sodium, exceeding the daily-recommended amount of 2, 300 milligrams (Ministry).

Like Americans, Singaporeans do not consume enough fiber from vegetables because most hawker dishes have barely enough of them to make up the recommended two to five servings. Take a plate of chicken rice for instance; the only fruit/vegetables it is served with are two small slices of cucumbers on the side. With high carbohydrate, high sodium and low fiber diets, it is no wonder that a handful of Singaporeans develop high cholesterol levels, albeit not as many as Americans due to the smaller portions that they consume.

Apart from eating habits, healthcare is also an important area to consider. In this paper's context, this includes prevention, diagnosis and management of high LDL-C levels. An integral part of why there are so many Americans with elevated cholesterol levels is due to the country's healthcare system. Of eleven developed countries, America's healthcare was placed last in a comparative study done by The Commonwealth Fund in 2014.

Healthcare in America is so expensive that it is ranked last in terms of costrelated access problems. Statistics from 2013 showed that one quarter of all
American senior citizens became bankrupt from paying medical bills (Kelley).
One might think that quality of healthcare in America must be high since it is
so expensive, but the reverse is true. Healthcare in America is in fact the
least efficient among the eleven countries, in that patients spent the most
time on "paperwork or disputes related to medical bills" (Davis).

Such expensive and inefficient healthcare definitely contributes to the high percentage of high cholesterol levels among Americans. Americans struggle to pay for a basic checkup, medication or surgery and therefore have no way of knowing their cholesterol levels, no way of diagnosing and no way to control it.

On the contrary, Singapore's healthcare was deemed the best in Asia in 2000 by the World Health Organization (Musgrove). Unlike America where there is no public healthcare, the Singapore government came up with copay health schemes including Medisave, Medifund and Medishield. These schemes require all citizens of Singapore to save up a fraction of their income into an account. This is in anticipation of future medical payments,

for themselves or their family members (" Understanding"). Through this policy, Singaporeans are given the assurance that they can pay for their hospital bills, checkups, surgery and medicine should they need them.

Another area in which the Singapore healthcare system excels in is the role they play in pushing Singaporeans to better health. The Health Promotion Board has numerous programmes that focus on educating citizens in healthy living and disease prevention. One example is the Healthier Choice Symbol (HCS) Programme that serves as a reminder for Singaporeans to make healthier food choices. The symbols are placed on food products or places that reach specific nutrient guidelines. HCS is no stranger to Singaporeans, as they can be spotted on food packaging, hawker centers, workplaces and schools. Its implementation has been effective, as statistics show 70% of Singaporeans are acquainted with the symbol. 69% of them also reported that HCS is useful in nudging them to make good food decisions (Health Promotion Board).

Seeing as to how active the Singapore government takes part in ensuring good health among its citizens, certainly justifies how the proportion of people with high cholesterol levels is significantly lower than America, whose healthcare system is lackluster in comparison.

It is without a doubt that many other factors such as stress management and physical activity can also contribute to the difference in cholesterol levels between the two countries. However, in my opinion it is more important to eat healthily by having a diet filled with balanced nutrients, as well as to only eat in moderation. Everyone should take charge of their health, but it is also

the duty of the government to educate its citizens and push them, making sure they are well taken care of.

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