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Singapore, Factor 11: Malnutrition

## **Singapore**

Singapore is one of the fastest developing countries in the world. With already advanced health care systems, education, and urbanization. They are just lacking in one crucial department, and that is food, which is the topic I will be covering today. The problem with a lack of food stems from three major reasons: the income of the average Singaporean, the availability of land and the practices used to farm it, and the effects that come from having this already poor quality diet. All of these topics will be covered as well as some of the current and future solutions that could be put into play. According to the World Food Index, Singapore is the second most food secure country in the world. But yet they still suffer from child malnutrition and adult malnutrition. Typical farming families in Singapore eat two to three meals a day ranging from small snacks to large feasts, depending on average income. They eat the food that is commonly grown in Singapore plus quite a bit of imported food seeing that they have very little farmland (Asia One News Staff, 2011).

Although Singapore is located in an excellent place for trade, there are still many factors especially with youth nutrition that can have a negative connotation with the country as a whole. With its strategic location and regional hub status in Asia, Singapore can play an important role in fostering greater public-private partnerships in the region to improve nutrition in the first 1,000 days. The Maternal and Child Nutrition Study Group called on governments to promote adequate health and nutrition for women of reproductive age, particularly pregnant and lactating women, to ensure their children have a head-start in good nutritional status (Science Direct, 2013). There is compelling evidence connecting maternal nutrition to increased risks in their offspring of developing chronic disease, particularly diabetes and heart disease, later in life.

Both undernutrition and over nutrition can have long term adverse effects. Of particular concern is the rapidly rising incidence of gestational diabetes and maternal obesity in Asia, which has major implications for the next generation (Ministry of Education Home Page). As government, medical, academic and industry representatives gathered at the first regional World Health Summit in Singapore, a group of nutrition organizations including global non-government organizations called for urgent action to ensure adequate nutrition for children in their first 1,000 days of life. Singapore's successes in maternal and child health can serve as a model for other countries. Since its independence, the country has achieved one of the lowest infant and under-five mortality rates in the world.

Although mortality rates in infants have decreased, malnutrition and other problems plague this country in relation to food insecurity. Malnutrition is associated with poor feeding practices, lack of access to clean water, sanitation, healthcare, social protection and initiatives to empower women. Also countries with high levels of stunted and underweight children face lower productivity as well as higher public healthcare costs. Malnutrition during a child's critical early years damages their intellectual and physical development, limiting their future economic participation in society, and increases their vulnerability to non-communicable diseases in adulthood. With a heightened risk of malnutrition children are not amounting to what they could otherwise become. They are not exceeding in education, the farming and agricultural rates are declining and they are no longer setting a good example for them to become healthy parents (Hogan, D., 2014).

As a result of parents becoming ill from not receiving adequate nutrition, not all patients who are at risk for malnutrition will receive intervention. Other patients, however, are undertreated because they are

difficult to treat due to health complications; the ideal nutrition therapy is not always clear or achievable for patients with severe, chronic illnesses, the critically ill, or the very old who have multiple illnesses. In addition, inappropriate over-use of parenteral nutrition in Asian hospital settings may lead to unwarranted complications, as well as excessive costs.

To address such gaps in nutrition care, clinicians worldwide have issued a “call to action” for increased recognition of nutrition’s role in improving patient outcomes. Clinical nutrition experts from Asia, Europe, the Middle East, and North and South America formed the feedM.E. (Medical Education) Global Study Group and put together a working program to increase awareness and improve nutrition care around the world. The global feedM.E initiative introduced the mantra “screen, intervene, and supervise” to cue the steps of a straightforward Nutrition Care Pathway. “Our nutrition care pathway represents standard of care in a systematic and straightforward way in order to facilitate use in everyday practice, from hospital admission through discharge” (Access Health International Home Page). Evidence shows that nutrition screening is not always done routinely, malnourished patients are frequently undertreated, and post-discharge nutrition planning is uncommon in many parts of the world, despite evidence that it can improve post-hospital nutritional and functional status of patients (Access Health International Home Page).

Past the early years of life, there are still multiple problems that we must deal with, including that one in three elderly people is not taking in enough calcium, carbohydrates and fiber to help withstand a healthy weight. With the heightened risk of malnutrition among adults and the elderly the rates of agricultural production are going down and adults are no longer setting good eating habits for the generations below them. Singapore has done an amazing job setting up the healthcare centers and the government that it needs to help further develop the country and to help the people as a whole. But this does not change the fact that the population is not getting the essential minerals, vitamins, and amino acids which is detrimental to their health. Global food security can be effectively enhanced to fully meet the requirements of a growing and more affluent global population.

While people are working every day to enhance the global food security for the entire world, the lack of proper income makes this extremely difficult. The average wage in Singapore can vary depending on the profession. The average monthly income is 3,500 Singaporean dollars approximately. Unlike many countries there is no minimum wage in Singapore, and it remains in the minority among developed and developing countries who have implemented it. Instead, salary is negotiated with the employer. Income tax rates in Singapore are amongst the lowest in the world. For non-residents working less than 183 days in Singapore you will be taxed only on income earned in this country. If you are working more than 183 days, you will be taxed on all income incidental to employment in Singapore. The highest rate of personal income tax is 20%. Enforcement and collection of taxes is by the Inland Revenue Authority of Singapore. Banks in Singapore operate internationally oriented with protected domestic banking market and firm regulators. Banks are well funded by the national government but they don’t have the level of security access that the nation requires to assist in donating money from their funds to help with produce and/or import. If the National Banks and the National Government find a way to redirect some of their funds it could go a long way in the fight against hunger (Access Health International Home Page).

While the banks in Singapore are more internationally oriented, farmers in Singapore are more locally and family focused. The wealthy island city of Singapore, with an area of 710 square km and a population of 5 million, is one of the most densely populated cities in the world. Average typical Singaporean farm households are growing smaller. Singapore's average household size has grown smaller over the past 10 years, from 3.7 people per household in 2000 to 3.5 in 2010. With most parts of the island’s land utilized for urban development, the remaining 250 acres of farmland is hardly sufficient to feed the growing population. As a consequence, more than 90 percent of Singapore’s food consumption is met by imports from over 30 countries. There are farms in the country responsible for the production of eggs, vegetables,

poultry, and pork, as well as naturally growing edible plants such as mushrooms and chives. But just because they are producing fruits, vegetables, and meats, does not mean that they are getting all of the nutrients that they need (Falkowitz, M., 2012).

Other major issues such as climate change, pollution, and population growth are only going to worsen the malnutrition problem in this country. Climate change would make it harder to find crops that will grow in this difficult climate. Pollution would contaminate the food supply and make it even harder to get your hands on the already scarce food crop. Finally, population growth would make getting food and growing food even more difficult, seeing as that population growth would be taking already scarce farm land. Having very little agricultural land and limited domestic food production, Singapore currently imports more than 90 percent of the food it needs to feed its residents and as well as the ten million tourists who visit every year.

Singapore, with a total population of 5.2 million, is one of the most developed economies within the ASEAN region, and has one of the highest per capita incomes in Asia. Singapore is strategically situated on the crossroads of major air and sea routes within the Asia-Pacific region, and is a major transshipment center for much of the Southeast Asian region and the Indian subcontinent. Singapore's geographic location has contributed to its position as an important hub for regional headquarters for international food and agricultural-related companies, in addition to being the world's fourth leading financial center after New York, London and Tokyo according to the BBC economic section. Expanding and strengthening multilateral and regional trade agreements can be a major contributor to this goal by enabling expanded market access, increased efficiency and greater investment in the food and agriculture.

Trade policies have had substantial impact on economic development. "In the early post World War II period, a number of developing countries after gaining independence, sought economic development by substituting imports with domestic production through import protection. But most of these countries could not achieve their objective, as import-substitution policies proved to be inefficient" (Shujiro Urata, 1994). The Trans-Pacific Partnership agreement on the other hand, which was signed on February 4, 2016 in Auckland, New Zealand, has been helpful in many ways. It is estimated to bring in annual global gains of \$295 billion, along with offering a pathway to free trade in the Asia-Pacific region. Which will greatly increase the amount of proper nutrition and access to healthy food and clean water for Singaporean residents. In turn this will significantly lower the rate of malnutrition in children and adults.

All of these factors are in relation to one another but the primary focus is that someone cannot buy food if they have no money; if one has no food they will have no energy to grow crops and to help make a difference in the society or community. Malnutrition in Singapore is not wholly due to the fact that they are lacking food, as I stated before, they are the second most food secure country in the world (Commonwealth Network Home Page). The World Bank could help in this with donating money to importing healthier food and by giving them the funds to buy their own crops and grow them. The UN could send people over to help Singaporeans learn how to grow new kinds of higher yielding crops. There are so many ways that the national government and the national organizations can help with this issue. Efficiency Trade liberalization will play an essential role in promoting global food security by making the international food system more efficient.

Regular citizens and local governments don't believe that they have the ability, money, or skill set to do what it takes to bring more food, money, or proper nutrition into the country. But they could do so much more inside of their community than what they realize. They could help support local farmers in becoming more efficient in crop raising and harvesting. Businesses could donate some of their local proceeds to help import more of the essential nutrients. Or they could simply grow their own garden to help provide for their families and their loved ones.

Redirecting some of the funds to better suit the growing population, economy, trade needs, and land requirements would help significantly in the fight against hunger. Other more developed nations can send workers to help teach them to plant crops that will excel in the harsh environment. Funding labs to help research types of plants that will thrive will help them to know what to plant. Larger trade borders would help bring in more imports to make sure that the citizens got their required nutrients. This would also help with export, seeing that it would bring in more profit to this country as a whole.

By providing producers with access to larger markets outside of their local and regional areas, economies of size can be utilized, enabling countries to expand food output efficiently. There are many ways in which we can help put a stop to malnutrition in Singapore; from increasing agricultural output to putting more essential vitamins into people's diets. Using these methods, we can, and will, put an end to malnutrition in Singapore.

In addition to the malnutrition in Singapore, I have my own personal experiences with the hunger problems that exist in my own community. In my neighborhood, we conduct a food pantry that my grandmother takes a large part in volunteering in. We also have EBT (Electronic Benefits Transfer) program installed that many of my close friends and family rely on to get them their daily essential nutrients. This involves money limit that is pre-determined based on your income rate. You can then use them to pay for any sort of grocery or food item that you would need. This helps so many of the people here that have been stricken by poverty. Without this system put together by the state, a lot of people would be going hungry and therefore suffering from malnutrition; this leads to not being an active member of society. In turn, this puts a negative impact on the children that look up to them as role models; such as family member or close family friends. I have seen this happen to people that I am very close to and I have seen it happen to the people in my own family. I have witnessed the devastation and the many ailments that can come along with the multiple illness that one can suffer from not having proper nutrition. I have also seen some of my very close friends suffer from eating disorders, which is a condition in which they are not taking in the amount of vitamins and minerals needed to sustain a healthy weight and a healthy lifestyle. This in itself is to me devastating, because I know that there are people out there that are not getting the needed nutrients because it is simply not available to them. Then there are people that are choosing to not have what is in front of them to help them maintain their image of beauty. This to me is heart-breaking. There is so much hunger, poverty, and disease that we could be working together to help but an end to. I genuinely believe with my whole heart and soul that together, we can put a stop to not only malnutrition, but world hunger, everywhere.

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