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A Growing Trend: Differences in Obesity and Hunger In Rural and Urban Areas

Hunger is a problem that has plagued the world for centuries. The problem has not necessarily been the supply of food, but it was the distribution of it. This has led to an abundant number of hungry and starving individuals throughout the world. These hungry are often allowed to go on suffering or even die because they cannot find sustenance for themselves. For years, the hungry have been the largest number of malnourished in the world. Only recently have the overweight overtaken them as the largest group of malnourished. This incline has slowly occurred and overtaken the number of hungry people in the world today. Now world leaders must tackle the new decision of how to deal with the overweight, not just the hungry.

The problem of obesity vs. hunger affects many countries. The problem is not just the detrimental physical effects that it can have on one's country's population; it brings with it many other terrible consequences. The malnourished put a strain on a country's economy because of the efforts made to deal with them.

The malnourishment problem can be caused by several different factors. Food production or lack of production can have a major affect on the distribution of food throughout a country. The quality of this food can also lead to a swing to the hungry or obese side. Poverty, children, gender, and occupations all can effect the way a country deals with malnourishment. One of the largest differences in many places are those among the rural and urban population of a country.

Maldives is a chain of 26 coral atolls that are located southwest of Sri Lanka. The islands form a 468 mile long and 73 mile wide strip across the equator. These 26 coral atolls are home to approximately 1192 low-lying coral islands. Of these, many are so small that they are nothing but uninhabited sandbars with a small patch of brush. Others are several kilometers across and covered with lush, green vegetation. Throughout the Maldives territory, only four percent is considered dry land. Much of it is ocean waters and small coral islands. This separation and lack of land helps to contribute to the problem of malnourishment throughout the Maldives Republic.

Maldives has long been a sultanate. It was first under Dutch rule, then British protection. It became its own republic in 1968 and has been under the rule of President Maumoon Abdul Gayoom since 1978. During his time he has promoted tourism to some of the islands, which in turn have boomed into the luxurious tourist hotspots they are now. The Maldives that the average person does not see is the one that tourists are not allowed to travel to. Tourists are allowed to stay on 80 different islands. The rest are inhabited by Maldivians only, with the exception for a few outsiders studying in that part of the world. This creates a large difference in the composition of the population and the health status of the people of Maldives.

Tourist Maldives, for lack of a better phrase, is much like any other vacation spot. It is full of hotels and resorts that accommodate to those wealthy enough to afford them which creates an entirely different atmosphere than that of rural Maldives. This urban area is abundant with food. The urban atmosphere allows food to be obtained easily and suits its inhabitants to a much easier life. Tourism is the lifeline that supports the island of Maldives economically. Due to this fact, exceptions are made that are not allowed on other islands. The general population of

Maldives is Sunni Muslim. Alcohol is prohibited in their religion. Due to this, alcohol is not sold anywhere but in the hotels that accommodate the tourists. This allows the population in the tourist areas to have access to alcohol. For those who stray from their religion, it can have a detrimental effect.

A scientific study of 37,000 people, found that those who had one or two drinks a day had a significantly lower body mass index than those who consumed the greater quantities of alcohol. Body mass index is a measurement that is calculated by taking an individual's weight in kilograms and dividing it by their height in meters squared. Normally a low BMI indicates a lean, healthy person, where as obese people have higher BMI's. This connection between alcohol and body mass index can be assumed from the sugar in alcohol.

As Dr. Breslow, an epidemiologist in NIAAA's Division of Epidemiology and Prevention Research, says," "Alcohol is a significant source of calories, and drinking may stimulate eating, particularly in social settings. However, calories in liquids may fail to trigger the physiologic mechanism that produces the feeling of fullness. It is possible that, in the long-term, frequent drinkers may compensate for energy derived from alcohol by eating less, but even infrequent alcohol-related overeating could lead to weight gain over time."

Another variable that could contribute to obesity in urban Maldives is the availability of creature comforts. In urban Maldives, creature comforts like restaurants, television, Internet, and mass transportation are readily available. These modern conveniences help to promote a more lethargic lifestyle. This lifestyle requires less physical work from the urban Maldivian. Television could be one of the largest culprits to blame for obesity. Television promotes inactivity among viewers. A scientific study done by Katharine A. Coon, MS, Jeanne Goldberg, PhD, RD, Beatrice L. Rogers, PhD, and Katherine L. Tucker, PhD of the School of Nutrition, Science and Policy, Tufts University in Boston found that the dietary patterns of families who normally include television in their meals end up eating less healthy food like fruit and consuming more pizza, soda, and other junk foods. This changed diet results in higher caloric intake and lower caloric expenditure. The increase in calories stored in the body helps to promote obesity.

On the other end of the spectrum, we deal with hunger. Hunger is not much of a problem in the urban portions of Maldives. In the unvisited, rural portions of Maldives distribution can be a problem. Remembering from earlier, all of Maldives is not available to be visited by tourists. This unavailable part is where the rural, or native, Maldivians live. Since these places are unavailable to tourists, they have not been cultivated by the tourist industry. This prevents them from having all of the creature comforts that help to promote sloth. This lack of television, junk food, and other such comforts leads to a harder lifestyle. This keeps the majority of the native population from accumulating the unhealthy eating styles that can lead to obesity.

The hardships of life help to provide an exponential advantage for hunger to prevail. The rural areas of Maldives have poor transportation and accessibility, which makes it hard to distribute medical supplies. This lack of supplies creates an area where disease is not hindered at all. This reign that it is given helps to promote poor health.

Immune systems are not able to keep up due to the constant battle with this disease. This helps hunger to prevail. Also lack of a decent supply system does not allow those who are emaciated to receive help or to have decent food air dropped to them.

Another variable that helps to promote hunger in rural Maldives is the environment. Virtually none of the soil is farmable, so self-sustenance due to agricultural means is virtually non-existent. Another problem is that the ground water supply is contaminated due to their rural sanitation arrangements. Reliant on rain water, Maldivians are at nature's will on their water supply.

Maldives is a perfect example for the discussion of the differences of hunger and obesity. Its extreme differences between urban and rural allow us to examine the effect these variables have on hunger and obesity. Also, the extreme isolation of the rural part of Maldives helps to further magnify the hunger situation. The extreme isolation prevents the outside world from affecting the way hunger is dealt with. It also allows a pure, uncontaminated view of the way these people live. The urban portion, on the other hand, is an outstanding example of modern society. This example helps to show how modern society and the creature comforts that come along with it amplify the problem of obesity in both Maldives and around the world. Taking a close look at Maldives and the inter-relation of obesity/hunger and urban/rural variables allows us to have a clearer paradigm of the world today.

The biggest problem with the obesity situation in Maldives is the same as it is here. Lack of understanding when it comes to eating right keeps many people above their healthy weight range. A suitable plan to help promote healthy eating could benefit all of the people of urban Maldives. An understanding of what one is eating and how it affects one's body is a must for any individual to stay within a healthy weight range. Without this the convenience of modern food will prevail and with it will the bulk. The first thing that I think would need to occur to diminish the number of obese people in Maldives would be to start a better nutrition program that would educate a majority of people as to the benefits of healthy eating and basic nutritional needs.

Obesity is the more controllable of the two problems on faced on Maldives. The obesity problem is due to wrong choices. These choices can be blamed on the people that make them. Obesity is due to excess. Excess can be controlled. Education among the people could help them to make better choices. This control of excess could in turn help to reduce the Maldivian's excess.

Hunger is the one of the most appalling of problems world wide. There is no exception to this on Maldives. Two variables help to contribute to this situation. The larger of these to is the lack of connection in Maldives. The other problem is the lack of fertile ground on the island of Maldives. Due to these two problems rural Maldives is plagued with hunger.

The smaller of the two problems is also the least controllable through realistic means. Lack of fertile ground is a problem that cannot realistically be fixed by

governmental involvement. This lack of ground does not allow for farming for sustenance. This means that inhabitants of Maldives rural islands are forced to go find their food elsewhere. There are a few suggestions to aid in overcoming this problem. The encouragement of growing crops that can prevail in a sandier soil could possibly boost the output of Maldivian agriculture. Unfortunately, sustenance still could not be obtained.

The other possible solution to this would be reliance upon hydroponic farming. In hydroponic farming the crops are grown completely in water, with the minerals added in. This could be implemented on the island of Maldives to aid in the improvement of agriculture. This would require the government to buy or aid in the buying of the equipment needed for hydroponic agriculture. An increase in education would be needed for those who would be doing the farming. This solution would increase the output of rural farms around Maldives. A system of government operating hydroponic farms on each island could help to greatly increase the amount of fresh produce available to rural Maldivians. Another way that this solution could be possibly obtained is if the farms were aided by donation of time, funds, and supplies from the major agricultural companies of the world. This system of hydroponics might not be able to completely solve the problem, but it could most certainly decrease it.

The largest problem associated with hunger on Maldives is the lack of connectedness. The islands are so separated and rural that there is no reliable operation for getting supplies to the inhabitants. This problem, however expensive, could be easily solved. A great involvement from the government of Maldives or other countries could help to create a reliable system to distribute food from around the world. This would increase the amount of food available to the rural Maldivians. This food would have to be supplied by the government or by donations due to the lack of funds available to rural inhabitants of Maldives. To complete this system massive donations would be required and an infrastructure to run this system created.. In the end though, this would be the most economical and most practical situation for dealing with hunger in rural Maldives.

The difference in hunger and obesity in rural and urban areas is amazing. In the area I studied, the urban areas were more prone to have an obesity problem. I conjecture that this is due to the amount of creature comforts available to everyone in these areas. The increase in these comforts made life easier. This was also due to the larger amount of food available. Rural areas differed because they had an increased number of hungry people. Hunger was due to the lack of food available. In conclusion, I believe that the hunger and obesity were variable to the area they were in. Which one would prevail, in my area of study, seemed to be dependent on the population. The population helped to affect the development, which further influenced whether hunger or obesity would prevail.

Obesity and hunger are two problems that plague the world today. The extreme difference in these problems is what makes them so interrelated. One is a problem of shortage while the other is a problem of surplus. Surplus is easily controllable if proper education is available to all. This proper education can help to show the benefits of

eating healthy and staying in a proper weight range. Obesity isn't just physically detrimental to the individual. Obesity also affects one's mental image and can lead to psychological problems. This is why it should be a main priority of the world to overcome the lack of education that leads to obesity. There are people who, no matter the level of education, will simply not care or have the self control to eat right. These people we cannot effect. Proper nutritional education could help many people though. This awareness of what they are eating and how it affects their bodies could greatly reduce the number of obese people.

Hunger is the reciprocal of obesity. Hunger is due to shortages. No matter how much those affected by it try, they cannot make due with what they have. The most obvious way to overcome this problem throughout the world is to properly distribute the food available in the world. All over the world, it is a matter of morals vs. money. Despots let available grain rot rather than feed the needy. These despots are only interested in profit. By properly taking from the obese and giving to the hungry we could help to curb these problems. This would take planning from all governments and cooperation among us all. However, with hard work it could be obtained.

As a society it is our duty to watch over and take care of our own. As a human race we should do this for all of mankind. One major responsibility is to make sure everybody has enough to eat. In recent years, it has become an equal problem of some having too much. The leaders of the world need to work together if we are to overcome the problems of obesity and hunger. Only by properly educating people and distributing food can we obtain a world that is ideally fit for all of us.

Bibliography

A Connection Between Alcohol and Your Body Mass Index.

<http://sheknows.com/about/look/5350.htm> Online. September 9, 2005

Between Use of Television During Meals and Children's Food

Consumption Patterns. <http://pediatrics.aappublications.org/cgi/content/full/107/1/e7> Online. September 2, 2005

Obesity: BMI Around the World. http://ww.who.int/cardiovascular_diseases/En/cvd_atlas_09_obesity.pdf Relationships Online. September 9, 2005

Springer, Marek. Personal Correspondence. July 9, 2005

The Cost Of Hunger. http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/003/X9800e/x9800e07.htm Online. September 9, 2005

The Development of Maldives. <http://uk.oneworld.net/guides/maldives/development> Online. September 2, 2005

