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## Understanding Trends in Global Nutrition: The Paradox of Hunger and Obesity

The United States has a staggering number of health issues caused from malnutrition. Malnutrition can be defined as the lack of nutrients and also the intake of an excess of nutrients. These health problems affect many people of all ages and backgrounds. Usually when people think of the malnourished, they think of Ethiopia and all the commercials they've seen on television asking to send money to support a child. They would be surprised to find out that 80 percent of the United States is considered malnourished (Sludge). A large portion of Americans are getting too many calories but not enough nutrients. On the other hand, anorexia affects over five million Americans (Greenwood). Similar eating disorders, such as bulimia, affect a large number of people. It is hard to pinpoint an exact number because many cases go unreported. Obesity and eating disorders like anorexia are two extreme disorders that affect Americans and take a heavy toll on the health care system. The government has tried to help out the low income families that suffer from these diseases by implementing programs such as food stamps and WIC. Obesity causes health problems such as diabetes, cardiovascular diseases, and coronary heart disease (Diet, Nutrition, and Chronic Disease in Context). Starvation-like eating disorders take a huge toll on the body by causing the body to shut down many of its vital systems. Obesity and hunger do not only affect adults, but children also. Diabetes among younger children is on the rise. This is believed to be caused by the increase in obese children. With more and more starchy and sugary snacks targeted towards kids, it is no wonder that children have a tough time making the decision to eat an apple instead of a candy bar. Anorexia is also prevalent among younger people. Any high school girl could name at least two people who suffer from a similar eating disorder. These eating disorders have lead to many debates among lawmakers on the role the government should take when dealing with these issues.

The typical American family is constantly changing and very difficult to define. With the increasingly high divorce rates children often have two separate homes with two sets of parents or they may live with a single parent. The typical family of two parents with two and a half kids is not so typical anymore in the United States. Just as a definition of a typical family does not exist, there are no typical people who suffer from obesity. Obesity affects many different people from all different kinds of backgrounds and ethnic groups. However, people with lower incomes tend to suffer especially from obesity.

On the other hand, anorexia, bulimia, and other similar eating disorders are becoming an epidemic among Americans. Generally, girls are more affected by these disorders than boys. Often an eating disorder comes from a combination of low self-esteem, depression, and peer pressure to look like the model on Vogue. Statistics are sometimes difficult to compute for eating disorders. This is because many cases are not reported. It is often times hard to recognize signals leading up to the disorder because the victims get very good at hiding them. It is estimated that seven million females and one million males suffer from bulimia or anorexia ("Anorexia and Bulimia: Understanding the Problem."). This estimate is probably very low based on the number of girls at Centerville High School who suffer from anorexia. There are many typical and non typical American families who suffer from both starvation and obesity.

For American families to avoid malnutrition, they must become more food conscious. What is missing in most American's diets are lots of vegetables and fruits. Too often the food Americans eat is full of sugar and lots of carbohydrates. Fast food chains make it even easier to obtain food at a relatively low cost (if you use the Dollar Menu). Unfortunately, fresh fruits and vegetables are sometimes more expensive in fast food chains than unhealthier food and not as convenient to obtain and store. For example, a double cheeseburger costs only one dollar at McDonalds. The fruit and walnut salad, on the other hand, costs around \$2.49. Fresh fruits sometimes rot in a day or two, whereas Twinkies can be kept for all eternity (or so it seems). Also adding to the large increase in obesity is the change in portion size. Americans consume very large portions in comparison with other countries (i.e. China). As more and more jobs require less physical work, the calories people burn in a day go down. America needs to be put on a healthier, common-sense diet. People do not need to starve themselves to be skinny as skinny does not always mean healthy. Eating more fruits and vegetables and exercising on a regular basis is the key to having a healthy body.

The human body needs nutrients including proteins, carbohydrates, fats, minerals, and vitamins. Naturally, the body gets these from the food consumed. Unfortunately, obese Americans are taking in too many fats and carbohydrates and not enough vitamins and minerals. Proteins are very important when it comes to building cells. They make up the structure of our cells. We get proteins from foods such as meats, nuts, milk, cheese, and eggs (Proteins and Carbohydrates). While taking in too many of these proteins can cause weight gain, starving oneself of these vital nutrients can cause the body to break down organs and tissues. According to RDA requirements, "an adult should consume approximately 0.36 grams of protein per pound of body weight on a daily basis (0.8 grams of protein per kg of body weight) as a minimum requirement" (Proteins and Carbohydrates). Carbohydrates are the main supply of energy. These nutrients can be obtained by eating breads, fruits, grains, some vegetables, and sugar. When people consume these energy packets without burning them off by exercise, weight is gained. Americans are famous for their large intake of carbohydrates, especially sugar. Carbohydrates should not be cut out completely from a diet as they do have many medical benefits.

Fats are just important to our diet as any other nutrient. The type of fat is the important part though. Natural fats that come from nuts, fish, and vegetables are beneficial to the body as long as they are not consumed in large amounts. Vitamins and minerals are important to our body systems because they help reactions take place in our body. There is a limit, however, on how much of a good thing our body can absorb. For example, our body has a limit on vitamin C. After it has reached that limit, the excess vitamin C is no longer absorbed and is simply passed through the body (Proteins, Carbs, and Fats).

All these different kinds of nutrients share a common theme: balance. By eating the right amount and right combination of foods, people can live a happy and healthy life without starving themselves.

Most family incomes do allow for consumers to purchase healthier foods in America. Generally, vegetables and fruits are fairly reasonably priced. In the grocery store that I work at, I can buy bananas for around 25 cents per pound. Apples, peaches, corn, and other fruits and vegetables are also prices at affordable prices. So why do people buy unhealthy foods if healthy foods are affordable? Honestly, if you were given the choice between an ice cream cone and broccoli, which one would you pick? Most people would pick the ice cream because it tastes better. People choose what to eat based on taste. Foods that contain sugar, oil, and lots of carbohydrates generally taste better and are more convenient to obtain.

For parents that have trouble supplying food for their families, the Food Stamp Program was established. Since the program went into effect, the fat, sugar, and meat consumption increased among the families who receive food stamps. (Drewnowski). One study from the USDA reported that "low income families purchased lower cost items and spend their limited resources on fats, sweets, and alcohol (Drewnowski). Obviously the provision of extra money for food is not helping families buy healthier food, just more junk food. Some kind of an incentive for food stamp participants to buy fruits or vegetables should be initiated. Perhaps a class should be required to teach food stamp recipients how to manage their limited resources and purchase the healthiest meals possible.

The government already has in place some programs to help women, children and low-income families. One program is called WIC (Women, Infants, and Children). It allows women with children to buy the basic necessities such as milk, bread, eggs, cereal, peanut butter, and cheese. The food stamps program also provides extra money to buy food. Organizations such as the Lord's Cupboard and Meals-on-Wheels use donated food to help out the hungry.

One key way to combat nutritional problems is to integrate a health class into elementary classes. Kids need to be taught at a young age how to eat healthy. It is very difficult to change adults and teenagers' eating habits when they are already set in their ways. By teaching kids while they are young, one can more effectively impact their ideas of what to eat. Still, as the famous saying goes, "you can lead a horse to water, but you can't make him drink." The decision to lead a healthy life can only be made on a personal level. The government needs to decide how far it can go to be the most effective in combating malnutrition without wasting tax payers' money. Why should tax payers pay for someone's irresponsible and unhealthy actions?

Hollywood, magazines, and television influence our culture when it comes to

fashion and image. In the age of computers, movie and magazine editors are able to erase many of the flaws that Hollywood actors and actresses have. This creates an unreal expectation of what the "perfect" girl or guy should look like. It puts a huge amount of pressure on the "regular" people to look a certain way. Often this can lead to depression which is a main factor in eating disorders. Some people try their best to look like a certain actor by starving themselves or other unhealthy ways of loosing weight. Others take the opposite approach and just give up hope and continue to indulge themselves in food at an unhealthy rate causing excess weight gain. It would be a step in the right direction if Hollywood could tone down its air-brushing technology and let some of the natural flaws of actors and actresses show. It may give people hope by seeing that even the "beautiful people" are really human too.

School lunches are another issue. Unfortunately, for some kids, the school lunch is the best and sometimes only meal they get all day. School officials need to try to make school lunches as nutritious as possible. Often times, the lunches aren't of the highest quality. They are designed to be quick and easy, and often nutritional value is put on the back burner.

Dietitians should make some evaluations and to try to work with the schools to make nutritionally balanced meals within the budget of the school system.

Over the past 50 years, the trends in the food we eat have changed. Carbonated drinks are more popular than ever. The average American drinks around 53 gallons of soda pop each year (Pop and Cavities: Cavities in a Can). Soda pop is filled with sugar and large consumptions of this product can lead to diabetes. Also fast food chains have become very popular and accessible. Our daily activities have changed from hard work on the farm to relaxed urban and city lives. People no longer have to cut wood for our fires, but can now simply turn on the heater. Kids spend more and more time at the televisions and computers than they ever have before. When deciding to go somewhere, most people jump into the car or other vehicle instead of riding their bike or walking. This has cut down on our daily exercise so that the general needs to purposely exercise to remain healthy (Diet, Nutrition, and Chronic Disease in Context). These trends show no indication of changing and seem to get progressively worse as time goes on.

Obesity in the United States tends to affect lower class citizens more than the upper class. Lower income families tend to use their resources on cheaper food. Since sugar is easily produced, the price of sugary foods is more affordable. People choose what foods they are going to buy mainly based on taste. Sugary and salty foods generally are more appealing than broccoli or carrots. As stated earlier, food stamp recipients generally buy many unhealthy snacks and lots of carbonated drinks. This is backed up by USDA studies that show that "low income families purchased lower cost items and spend their limited resources on fasts, sweets, and alcohol" (Drewnowski). Lower income families need to be taught how to use their limited resources to purchase healthier food and have a healthy lifestyle.

On the other end of the spectrum, trends in anorexia, bulimia, and other

starvation like disorders are on the rise. Generally speaking, these disorders are more frequent in younger middle to upper class girls although it does affect boys and lower income families. Kids are dieting at a younger and younger age. One statistic says, "forty-six percent of nine to eleven year olds frequently diet to prevent weight gain" (Anorexia and Bulimia: Understanding the Problem). At this age, their bodies are continuing to grow and mature and are constantly changing. Still, they are concerned about their weight. In one study, 42 percent of first through third grade girls said they wanted to be thinner (Anorexia and Bulimia: Understanding the Problem). It has been found that eating disorders such as anorexia and bulimia begin at a young age. One third of Americans with eating disorders showed these signs between the ages of 11 and 15, while only 14 percent developed the disorder after the age of 20. These people have a distorted view of their image, often putting little value on their own self worth. The high pressures in their life seemingly force them to control their self-image through unhealthy diets. Frequently, they see thinness as being the key to their happiness.

This trend can be especially seen in the modeling world. In the 1960's, the 'ideal' model "was 5 feet 8 inches tall and weighed 137 pounds" (Anorexia and Bulimia: Understanding the Problem). Forty years later, this number was drastically cut. Nowadays, "the average model is 5 foot-7 and weighs 105 pounds" (Anorexia and Bulimia: Understanding the Problem). Marilyn Monroe, the sex symbol of the 1960's, was a size 10. Many girls and women get their ideas of the desirable figure from magazines and the models they see in the media. Thousands of companies feed on women's insecurity by supplying all kinds of beauty products that promise to make a women look sexy and physically appealing. The media seems to put unreasonable standards on women to look a certain way. These things contribute greatly to the increase in eating disorders among women and young people in general.

Both obesity and starvation problems can be alleviated with the increase in technology. The United States is able to produce more crops than it ever has before. With this increase in crop production also comes an increase in the use of pesticides. Thus, a new problem surfaces. Pesticides are used to kill any type of pest that might reduce the yield of the harvest. Sadly, chemical pesticides are sometimes washed down into nearby streams and rivers where they can damage delicate ecosystems. Governments should do their best to push biologically-based pesticides and organic farming as much as possible to cut down on the pollution of chemical pesticides. By encouraging organically grown crops, the environment may be saved from the negative effects chemical pesticides have on our earth's ecosystem (About Pesticides).

Superior crop production and enhanced livestock production helps feed the world, but at the same time causes environmental problems. Large quantities of manure produced from livestock are also guilty in harming our environment. California has over 100,000 square miles of underground water that was polluted from agriculture run-off including livestock manure. High levels of nitrate in the drinking water caused by livestock run-off can cause baby-blue-syndrome which can kill infants (Facts about Pollution from

Livestock Farms). Over 40 diseases can be transmitted to humans from animal manure. Additionally, manure pits from large hog confinements can produce a poisonous gas called hydrogen sulfide. This gas can cause flu-like symptoms and also brain damage. In 1998, 19 people were reported to have died from hydrogen sulfide emissions (Facts about Pollution from Livestock Farms). Farmers need to be taught how to deal with these facts and protect our drinking water for future generations. By protecting the environment, food producers can not only assist with problems of starvation and obesity, but can also make the world a better place to live.

Fortunately, these problems can be minimized or prevented. First, education seems to be a leading factor in the fight against obesity and other eating disorders. Children need to be taught at a young age how to make wise, healthy choices when it comes to choosing what food to eat. They need to be required to take a class that helps them develop a strong level of self esteem and respect for their bodies. When people learn to take pride in themselves, they will try harder to live a healthy and respectable life.

As previously stated, America's diet needs to shift towards more fruits and vegetables. One way to promote this is to support family owned farms and become involved in a local farmer's market. A farmer's market could help consumers get fresh fruits and vegetables and also help small farmers make a little extra money. Unfortunately family farms are disappearing. By giving tax breaks to these family farms, the government can lend a hand in saving America's heritage while producing quality products that will assist in America's journey towards a healthier lifestyle.

Farmers also need to be made more aware of the serious effects of their actions. New pesticides that are more environmental friendly should be made available as soon as possible to reduce the use of chemical pesticides. Farmers need to be more aware of safe and environmentally prudent ways of managing waste and other products. With the help of education and increasing awareness, American farmers can work towards a safer environment that still allows them to produce as many crops as possible.

An outbreak of unhealthy lifestyles is taking hold of America. Around 80 percent of the United States is considered to be malnourished. This is a perplexing and serious condition our nation needs to solve. The government has been trying to assist lower income families with the financial strain of buying food. It has put into effect programs such as the Food Stamp Program and WIC which helps women and children. Local groups such as Meals-on-Wheels and the Lord's Cupboard have been doing their part in combating the fight against hunger. Since lower income families tend to be more over-weight than high income families, the needy families need to be educated how to improve their health by purchasing healthier foods. Writing this paper made me wonder how my own family measured up. I looked into my pantry and counted four different varieties of chips, three different kinds of snacks that were made of mostly sugar, and a few fresh fruits. I realized that my own family's eating habits needed to be adjusted to include more vegetables and fruits and fewer sugars and carbohydrates. When it comes down to it, America's health needs to be

important to each individual on a personal level. By encouraging each person to find time to take care of his/her own body, we can turn around this trend of unhealthy eating habits. If Americans can learn to take pride in themselves and love themselves for who they are, they will take better care of themselves and their bodies. A large majority of people with obesity and starvation-like eating disorders suffer from depression and low self esteem. By teaching people how to eat healthy and make wise health choices, people will be empowered to be more self confident. Eating disorders will become a problem of the past. When people can learn how to love themselves and treat their bodies with respect, they can move towards a healthier and happier life.

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