

Molly Gosmire, Student Participant  
Mitchell High School, South Dakota

## The Battle of the Bulge

According to the Webster Online Dictionary, obesity is an excessive amount of fat, which is measured by one's BMI (body mass index). The Center for Disease Control and Prevention (CDC) says that 'obesity' and 'overweight' are labels for ranges of weight that are greater than what is generally considered healthy for a given height. If someone is obese they have an unhealthy amount of body fat. Everyone needs some body fat, but too much fat can cause health problems. The main causes of being obese are eating too much and/or not being active enough. If a person eats more calories than one's body burns up, the extra calories are stored as fat. Everyone has some stored fat. Too much fat results in being overweight or obese. Other factors that might affect weight include genes, metabolism, racial/ethnic group, and age.

Obesity is a worldwide problem. Currently there are more than 1.2 billion people in the world that are classified as overweight and, of those, 250 million people world-wide that are obese. The World Health Organization (WHO) states that at least 300 million people will be obese by 2025. The International Obesity Task Force (IOTF) currently estimates that 22 million of the world's children under five years of age are overweight or obese. Scientists are documenting it as the global "fat" problem. Obesity mainly affects developed countries, but Third World countries also are seeing obesity increasing dramatically. When looking at the global picture, the highest rates of obesity in the world are found among Melanesians, Micronesians, and Polynesians. They are also high in ethnic groups such as American Indians, Hispanic Americans, and Pacific Islanders.

IOTF projections show that obesity levels have doubled in some countries in the last few decades and could more than double again. The 1980 figures in England showed that obesity stood at one in fourteen or 7 percent, people were obese. Those numbers rose by 1991. It doubled to 14 percent, one in seven people were now considered obese. Experts there are estimating that by the year 2025 one in three or 33 percent, people will be obese. In 1961, obesity in the United States was around 13 percent, or one in eight people. In 1991, it was one in five, or 22 percent of the population. By 2025, experts are estimating that it could be as high as 40-45 percent; about two in five people will be obese. It is estimated that more than 115 million people suffer from obesity-related problems in developing countries and developed countries. This is the same picture for industrialized countries like Australia.

In the United States alone, obesity results in a \$100 billion health bill each year. As Globalist.com put it "In the eyes of the world, the United States is currently considered a leading force for democracy and capitalism worldwide. But there may come a time when the United States is better known as the world's leading purveyor of snacks and high-fat foods."

Obesity is the second leading cause of preventable death in the United States. In 2000, 31 percent of adults were obese and five percent of adults were severely obese. The number of overweight children has doubled in the last two to three years. Currently statistics show one in five children in the US is overweight. Alarmingly, with children that are two to five years old, 20.6 percent of them are already obese. With adolescents 12 to 19 years old, there are 30.4 percent who are obese.

Obesity is higher among minorities in both children and adults. In fact, the prevalence of obesity is highest among Mexican-American boys and African-American girls. The number of Mexican-American children that are one to two years old is double the number of non-Hispanic white children that

are the same age. Non-Hispanic, African American girls also exhibited a higher prevalence of obesity than non-Hispanic white girls.

According to the American Heart Association, for children aged two to five in the United States, the percentage rate of obesity is over ten percent, up from seven percent in 1994. New statistics are showing that nearly four million children ages six to 11, and 5.3 million young people ages 12 to 19, were overweight or obese in 2002. "Some kids are drinking a liter or two liters of soda a day. In 10 to 30 years, the incidence of heart disease, stroke and diabetes are just going to be astronomical," said Cochran, a member of the task force on obesity for American Academy of Pediatrics.

It is a fact that children are better copycats than listeners. They are more likely to do what their parents do, rather than what their parents say. Through research, backed up by observation, it can be shown that parents are not always the best role models for their children. If a child sees his or her parent eating a candy bar they will do the same. If a parent skips breakfast, the children will do the same. If their parent drinks pop all the time, the children will also drink pop. Also, toddlers and younger children are not old enough to get their own food, so they eat what is put in front of them. It is, therefore, the parents' responsibility to model good behavior, to buy and prepare healthy foods.

There is also the issue of the on-the-go lifestyle and dual-working parents relying heavily on convenience foods that contributes to teens' poor eating habits. Media has an influence, according to Sheila Kelly, a clinical dietitian at Providence Hospital in Washington, D.C. By the time a child reaches adolescence, he or she has seen more than a hundred thousand food commercials on TV. Many of those commercials are advertising high-fat and high-sugar foods.

All of this information underscores the statistics that indicate childhood obesity is getting way out of control. Twenty-five percent of all white children in the US are overweight, thirty-three percent of African Americans and Hispanic children in the US are overweight. According to a study done in 2000, obesity is the highest with people who have an educational level lower than high school. Of that population, 26.1 percent were considered obese. This is compared to 15.2 percent of people who went to college, or 19.5 people who went to some college. Even people who finished high school had a lower risk of obesity at 21.7 percent.

Obesity is in all fifty states and its prevalence has also increased in all fifty states. The state with the lowest percentage of obesity is Colorado where only 13.8 percent are obese, according to a study done in 2000. From that same study it shows that the state with the dubious distinction of the highest percentage of those being obese is Mississippi with a rate of 24.3 percent.

The Mississippi Kids Count data book states that 31.7 percent of children are currently living in poverty, 65.1 percent of all students in that state are currently enrolled in free/reduced lunch, and 32 percent of children are classified in minority groups. The current average annual wage/salary in Mississippi is \$21,761 dollars compared with the national average \$32,518, an \$11,000 dollar difference. Additionally, approximately 61 percent of children are in families receiving food stamps. Those figures relate closely to the obesity problems experienced in Mississippi. According to a new study done in Jacksonville, Florida, eating healthy may be too expensive for people on food stamps. It found that an average urban family would have to spend \$230 dollars each month on top of their food stamps to eat a healthy diet. Researchers say that the amount of food stamps people get is inadequate for a good diet and are calling for local governments to re-evaluate the system.

Everyone needs to be concerned, if for no other reason than that the issue of obesity affects all of us as it signals increased health care costs. Overweight and obese individuals are at increased risk for many diseases and health conditions, including: hypertension, dyslipidemia (for example, high total

cholesterol or high levels of triglycerides), type II diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems, some cancers (endometrial, breast, and colon). Hospital costs that are associated with childhood obesity rose from \$35 million dollars in 1979 to \$127 million dollars in 1999

New studies from the Center for Disease Control and Prevention (CDCP) are suggesting that one in four overweight children is already showing early signs of type II diabetes. Also sixty percent of children that are overweight have at least one risk factor for heart disease. In eighty percent of the people who have type II diabetes and in seventy percent of people who have cardiovascular disease, the causes are related to obesity. Forty-two percent of breast and colon cancer diagnosed is among obese individuals. Thirty percent of gall bladder surgery is related to obesity. Twenty-six percent of obese people have high blood pressure. Ninety percent of type II diabetes is due to excess weight, lack of exercise, and poor diet. If type II diabetes continues to increase at its present rate, twenty-two million will have it in 2025. It is the sixth leading cause of death in the United States. It directly causes almost sixty thousand deaths each year and contributes to thousands more. Type II diabetes is preventable. Nine out of ten cases could be avoided if people would have taken simple steps to prevent it. So the questions that is left unanswered is, "If it could be prevented why don't people take the steps to prevent it?" and "Why are there so many people getting diagnosed with it when it's preventable?"

In a related issue, children that are obese have high cholesterol and blood pressure levels, which are risks factors for heart disease. Obesity cases a serve problem called sleep apnea, which is interrupted breathing while sleeping. In some cases this can lead to problems with learning and memory. Obese people have high incidence of orthopedic problems, liver disease, and asthma.

Obesity is the second leading cause of preventable deaths in the United States. The good news is there are ways we can prevent obesity, such as eating healthy. This does not always have to be expensive. A new study that was published in the Journal of the American Dietetic Associations shows just that. The participants were encouraged to limit food that was lower in nutrients and higher in calories and fat to no more than fifteen servings per week. At the end of the study, the families that took part put what they have learned into practice, making healthier choices and saw that their food costs actually dropped. Many consumers focus on the "high" cost of healthful foods like fruits and vegetables, but forget that high-fat meats, "convenience" food, snacks, bakery items, soft-drinks and other less nutritious goods can add up to significant expense. For most consumers, eating healthier is not just about adding more fruits and vegetables, it is also about using them to replace high-calorie/high-cost foods. A more healthful diet may also reduce food costs when portion sizes are downsized to match actual physical hunger. Buying less food means food costs will go down. The study showed that the drop in food costs did not occur immediately. Most of the drop occurred six to twelve months after the program started. The study shows many other things. It demonstrated how, by just decreasing the amount of food that is lower in nutrients and higher in calories and fat by a little bit at a time, one will be eating a healthier diet. Another thing is that if one decreases the portion size, money will be saved through buying less food. Lastly, it shows that any family can do it because its not one of those high priced solutions. It is something anyone and everyone can do, no matter what the income.

The International Obesity Task Force is working with the World Health Organizations as part of the International Association for the Study of Obesity to help with this obesity epidemic. Experts agreed that, "Without societal changes, a steadily rising and already substantial proportion of adults will develop the many medical complications of obesity. Obesity's impact is so diverse and extreme that it should now be regarded as one of the greatest neglected public health problems of our time with an impact on health which may well prove to be as great as that of smoking."

The epidemic reflects the profound changes in society and in the behavioral patterns of communities over the last twenty to thirty years. The fundamental causes for the obesity epidemic are changing behaviors and lifestyles, especially diets. As part of the obesity study, the International Obesity Task Force is working with the World Health Organization on a three-year program of action. The program aims to

- Alert more governments and policy makers to problem
- Win their commitment to deal with the problem effectively
- Follow through to ensure that action is taken.

The taskforce has twenty-eight members and draws on the support of many more scientific experts around the world to develop its working group programs. It is working with International Association for the Study of Obesity members associations in thirty countries to improve awareness and understanding of the global epidemic.

Specifically here in the United States, more than a decade ago, the U.S. Department of Agriculture created a powerful and enduring icon- the Food Guide Pyramid. It is a simple illustration that conveys elements of a healthy diet. The Pyramid is taught in schools, appears in countless media articles and brochures, and even shows up on cereal boxes and food labels. In an effort to be more accurate as new nutritional information become available, in January of 2005, the U.S. Department of Agriculture created not just one pyramid, but six different pyramids with guidelines according to one's age, sex, and amount of physical exercise a person engages in over the period of an average day.



Based on the information you provided, this is your daily recommended amount from each food group.

| GRAINS<br>6 ounces   | VEGETABLES<br>2 1/2 cups   | FRUITS<br>1 1/2 cups   | MILK<br>3 cups  | MEAT & BEANS<br>5 ounces   |
|--|--|--|---|--|
| <p><b>Make half your grains whole</b></p> <p>Aim for at least <b>3 ounces</b> of whole grains a day</p>  | <p><b>Vary your veggies</b><br/>Aim for these amounts each week:</p> <p><b>Dark green veggies</b> = 3 cups<br/> <b>Orange veggies</b> = 2 cups<br/> <b>Dry beans &amp; peas</b> = 3 cups<br/> <b>Starchy veggies</b> = 3 cups<br/> <b>Other veggies</b> = 6 1/2 cups</p> | <p><b>Focus on fruits</b></p> <p>Eat a variety of fruit<br/> Go easy on fruit juices</p>   | <p><b>Get your calcium-rich foods</b></p> <p>Go low-fat or fat-free when you choose milk, yogurt, or cheese</p> | <p><b>Go lean with protein</b></p> <p>Choose low-fat or lean meats and poultry<br/> Vary your protein routine—choose more fish, beans, peas, nuts, and seeds</p> |
| <p><b>Find your balance between food and physical activity</b></p> <p>Be physically active for at least <b>30 minutes</b> most days of the week.</p> |  | <p><b>Know your limits on fats, sugars, and sodium</b></p> <p>Your allowance for oils is <b>5 teaspoons a day</b>.<br/> Limit extras—solid fats and sugars—to <b>195 calories a day</b>.</p> |   |  |

This chart could apply to the mother of the 'family' in Mississippi who is thirty-five years old and gets less than 30 minutes of exercise a day. The chart would be based on a 1,800-calorie plan. It says that she should be eating 6 oz. of grains, 2.5 cups of vegetables, 1.5 cups of fruit, 3 oz. of milk and 5 oz. of meat a day. The pyramid also points out that the aim is to consume 3 whole grains a day. The USDA says to try to vary one's vegetables and set a goal for: 3 cups of dark green vegetables, 2 cups of orange vegetables, 3 cups of dry beans & peas, 3 cups of starchy vegetables, and 6.5 cups of other vegetables weekly. The USDA also wants people to consume 5 teaspoons of oils daily while making the recommendation of limiting extra fats and sugars to 195 calories daily.

Reflecting a more contemporary and practical approach, MyPyramid, as the new approach is called, does not focus on food groups alone. It also discusses:

- Activity as a reminder that daily activity is crucial
- Moderation to illustrate that some foods, while they may be eaten, need to be restricted in portion size (e.g. sugars)
- Personalization to reflect the fact that each person needs to adjust diet and exercise to meet their individual needs
- Proportionality to suggest how much each person should consume from each food group
- Variety illustrating the need to eat foods from all food groups
- Gradual Improvement reminds all that through slow, but consistent steps, we can all improve our nutritional and health habits

Rather than fall into old habits, improvements can be made in the issue of obesity if people had access to the fresh food like fruits, vegetables, cheese (dairy), and lean meat. As stated above, it does not require the South Beach Diet program and its \$65 cost over thirteen weeks plus the cost of food. Nor would it be necessary to use Jenny Craig at a cost of \$20 for the first 20 pounds, then a dollar for every pound after that, plus the cost of their food products for at least \$22 a week. It does not require a gym membership that can run anywhere from \$100 to \$500 per month. Now, that may not sound like a lot of money, but think about it when a person is making \$11,000 less than the national average, and there is a family to provide for. All that money adds up and it could have spent it on an adequate house, some clothes or something that is a necessity. So just saying 'eat healthy and work out' does not always work when you do not have the money.

Other than following the above USDA guidelines, what my family in Mississippi can do to begin to address the problem is as follows. They can start to cut down on the portion serving that they are eating. They can also limit the amount of food that is lower in nutrients and higher in calories and fat. They can set some time aside as a family three nights a week and do some enjoyable of activity like play a sport, do sit-ups or push-ups, just something to get the blood moving and the heart pumping. Since they have to walk to and from the bus stop on their way back, or on their way there if they do not mind getting sweaty, they can run all the way or part of the way. The key is to take little steps though. If one tries to begin with big steps it might be easier to become discouraged and therefore, easier to quit and give up.

Obesity means that there is an unhealthy amount of body fat, which is measured by the Body Mass Index (your BMI). Who is to blame for what scientists are calling a global epidemic? Fast Food? Cars? Television? Technology? One cannot blame any of those, even though they are all factors that contribute to the problem. The only thing we can blame is the lifestyle we have come to live in today's society. We can also blame ourselves for not doing much about it and contributing to this type of lifestyle. But with no one thing really to blame that means there are a potentially unlimited number of things one can do to fix it. All those factors contribute to the problem. With small steps toward change, eventually they can all improve.

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