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Obesity in America and its Children: Affecting the Lives of Millions

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Fast Food on Every Block

America is the land of plenty. Its citizens have more money, more jobs, more food, more technology, more land, more schools, and the list could keep going. They also have become a nation that is carrying around more weight. In the last half century America has turned into a nation with more than 60 percent of its population over weight, or more than 100 million Americans being over weight, .-2, 3. The number of obese adults has doubled since 1980 and the number of obese adolescents has tripled since then.² It is necessary to define what classifies a person as obese. By definition, obesity is having a BMI(Body Mass Index) of more than 30, .-4(3). BMI is a measurement that compares body weight to height. The more weight on ones body for his given height, the higher his BMI. It is possible, however, to have a high BMI and be in very good physical condition, like most athletes. BMI does not take in to account the distribution of fat on the body. Lean athletes have muscle mass that contributes more to their weight than fat contributes, .-5(191). TABLE 1 Your body mass index

On any given day of the year, nearly one out of every four Americans eats at a fast food restaurant and McDonalds contributes to that by serving more than 43 percent of the fast food eaten daily in the US and serving more than 430 million people a day, worldwide.² Exercise and physical activity is really lacking in America. More than 60 percent of Americans do not get any form of exercise during the day aside from walking in and out of their work place or doing every-day tasks.² Obesity is increasing and its increasing at an alarming rate, it is even starting to rapidly increase in children.

The days of eating every home-cooked meal at the dining room table with the family are gone, for the most part. Americans live in a society that is always on the go and always worried about the next task at hand. They like convenience and they like easy. Fast food caters to their lifestyles because it is fast and easy. Within fifty years, fast food restaurants have multiplied at exponential rates and are now located on every block and in every strip mall across America. It seems they are everywhere. One is almost guaranteed to find at least one McDonalds in any given city in the United States, regardless of the size of the city. This food is very easily accessible to everyone and it is relatively inexpensive. In 1970 Americans spent approximately \$6 billion on the fast food industry; in 2000 they spent an astounding \$110 billion. Americans spend more money on the food industry than they do on things such as college, computers, vehicles, and technology, .-6(3). One can call to have a greasy, large pepperoni pizza delivered to his door, or spend three minutes in the Wendys drive thru and grab dinner for the whole family. People can even order food over the phone and go pick it up. The fast

food industry wants them to buy their products so badly, that they are willing to make it available to them in the most convenient ways possible. Because Americans love convenience, they are willing to pay a little extra money for it.

With this change in lifestyle has come a change in eating habits. On average Americans are simply eating more food. A study showed that the average American male consumed an extra 168 calories per day in 2000 than the average male in 1971. The women consumed an extra 335 calories per day, -4(2). These extra calories ultimately lead to extra pounds gained, which leads to being over weight. One of the most significant changes over the past fifty years has been portion sizes. According to Harvard Mens Health Watch, some of the largest increases in food in the last decade were in soft drinks, salty snacks, French fries, and hamburgers. Not surprisingly, the greatest increases have been seen in the consumption of fast food, -4(2). Although it is probably safe to say that the general public is aware that fast food is generally not helpful to their bodies, they still eat it. Some people eat fast food as many as three times a day, with most people eating it at least once or twice a week. Most nutritionists would say that it is best not to eat any fast food at all if it can be avoided. If one must eat fast food, they would suggest only once a month.²

Less Nutrition, More Convenience

Not only have Americans been eating more, but they have been eating more foods that are low in nutritional value. A small french fry at McDonalds has approximately 200 calories; the Super Size french fry has about 600 calories.² It used to be that there was only one size of french fry and it was just called a fry. Now there are sizes all the way up to super size and most people tend to eat the large or the super size, especially when offered. Americans also drink copious amounts of soda and carbonated beverages. This nation has more than three million soda machines in its schools, malls, zoos, offices, shops, and just about everywhere else. That is approximately one machine for every 97 Americans.² They drink an average of 65 gallons of soda per year per person, .-6(53). In addition the the lack of nutrition in soda beverages, there is also poor nutritional value in almost any item on any fast food menu. For example, the Wendys Jr. Bacon Cheeseburger has 380 calories, 170 of which are calories from fat. It contains 19 total grams of fat, 55 milligrams of cholesterol, which is 18 percent of your daily value, and 34 grams of carbohydrates. Here are a few more examples of the nutritional information on some popular menu items from very well-known fast food restaurants.

Jack in the Box — Jumbo Jack with Cheese

Serving Size 306g

Servings 1

Calories 695

Fat Cal. 370

www.foodfacts.info

Amount/Serving	%DV*
Total Fat 41.5g	64%
Sat. Fat 16g	80%

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Trans. Fat ?g	
Total Carbs. 55g	18%
Fiber 2g	8%
Sugars 11g	
Cholesterol 70mg	23%
Sodium 1305mg	54%
Protein 24g	

* Percent Daily Values (DV) are based on a 2,000 calorie diet

Burger King — Whopper Jr. w/ Cheese — Low Carb

Serving Size 87g

Servings 1

Calories 190

Fat Cal. 130

www.foodfacts.info

Amount/Serving	%DV*
Total Fat 14g	22%
Sat. Fat 7g	35%
Trans. Fat ?g	
Total Carbs. 2g	1%
Fiber Og	0%
Sugars 1g	
Cholesterol 50mg	17%
Sodium 360mg	15%
Protein 14g	

* Percent Daily Values (DV) are based on a 2,000 calorie diet

McDonald's — Big Mac

Serving Size 219g

Servings 1

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Calories 600

Fat Cal. 300

www.foodfacts.info

Amount/Serving	%DV*
Total Fat 33g	51%
Sat. Fat 11g	55%
Trans. Fat ?g	
Total Carbs. 50g	17%
Fiber 4g	16%
Sugars 8g	
Cholesterol 85mg	28%
Sodium 1050mg	44%
Protein 25g	%

* Percent Daily Values (DV) are based on a 2,000 calorie diet

These foods share a lot of the same trends: high calories, fats, carbohydrates, and sodium. There are few vitamins and minerals to speak of and overall, poor nutritional content,.-7.

One doctor has placed the blame of American obesity on the shoulders of the fast food industry itself. Dr. Robert Lustig, professor of pediatrics at the UCSF Childrens Hospital in San Fransisco says Weve been fructosified and defiberized by the food industry, ."-8(4). The industry has taken almost all of the fiber out of its foods because fiber does not freeze very well or long, which does not allow much time for the food to keep as long as they would like. The fast food world also puts high fructose corn syrup in almost all their products because they know people will buy the food. It tastes good. And because the marginal cost of adding this corn syrup is low, the companies add it to everything, .-8(5). Since Americans are eating more fast food, they are eating more sugar and less fiber. Fiber is what slows down the absorption of sugar into the blood stream, so with out fiber in the food people eat, the sugar hits their digestive systems rapidly and is converted into fat if not used as immediate energy.

The food that is served in fast food chains is processed, pre-cooked, shaped, and frozen before being sent to the restaurants. About 90 percent of the money that Americans spend on food is spent on foods that have been processed in factories hundreds of miles away, -6(121). Their food is going through a process that the industry calls throughput, -6(67). They may not even realize this, or just dont care enough to think about it. The food goes through an assembly line very similar to that of a factory. The burgers at a Burger King restaurant are placed on a conveyer belt that takes them under the broiler where they are cooked evenly for ninety seconds. McDonalds ovens look like commercial laundry presses with giant hoods that cook the burgers in a standardized way, -6(69). Every patty looks the same and is constructed the exact same way. Uniformity is the key. The burger patties, chicken, and fries are frozen and the shakes and sodas all start out as syrups and powders when they arrive at the restaurants, -6(69). At Taco Bell restaurants, the workers do not prepare the

food. They just add hot water to almost everything and its ready to go. The refried beans are dehydrated flakes; the taco meat is frozen and vacuum-packed in a bag, .-6(69).

The only food preparation that the employees do at fast food restaurants is push a few buttons, thaw, reheat, and stick the food in containers to keep it warm. Food preparation has gone from slicing the tomatoes and onions on the spot to thawing and reheating the frozen patties that are produced hours ahead of time.

The lack of variety and choice in fast food started to become a topic of concern in recent years. It wasnt until the past five years that fast food restaurants started to offer some variety to their menus. For a long time McDonalds only offered burgers, fries, and a drink. There was no choice in what the consumer could eat. Now fast food chains are starting to catch on to the healthy trend and they are offering healthy choices. The lack of variety, until recently, also contributed to the poor nutritional values found in fast food. We were eating a bunch of fat, carbohydrates, sugar, and salt.

In 2001 Morgan Spurlock conducted his own experiment on himself and made the well-known documentary Super Size Me. In this film Morgan ate McDonalds for thirty consecutive days, three square meals a day. He had to eat everything on the menu at least once. He had to finish all of his food, and if he was asked to Super Size, he had to say yes. After thirty days of nothing but McDonalds it was painfully obvious that fast food can seriously hurt a persons body and health. Morgans body paid the price. He gained an astounding 25 pounds in those thirty days; his cholesterol sky rocketed by 65 points and his body fat percentage increased from 11 to 18 percent. He doubled his chances for heart disease and almost killed his liver by virtually turning it to fat. In eating McDonalds for thirty days straight, Morgan managed to consume a cumulative 30 pounds of sugar, -2. His results prove that fast food is not healthy and it has detrimental effects on the human body if eaten too often.

The best foods that can and should be eaten more regularly are those foods that have high healthy nutritional values. This means avoiding foods that are high in sugar or fat. Jeanne Jones, a nutritionist, suggests eating foods that provide protein, fiber, good carbohydrates, and good fats. A good carbohydrate would be any complex carbohydrate which includes all grain products and vegetables. These take longer for the body to breakdown and they are full of vitamins, minerals, and fiber, .-9(7). The best proteins to eat are lean meats such as fish or poultry. It is good to occasionally eat red meat, but its not something that should be eaten on a regular basis because red meat has a lot of fat and cholesterol, .-9(9?10). When you are avoiding foods that are high in sugar and fat, try going for fruits and vegetables. Eat a medium-sized apple instead of a medium-sized cookie. It will take you much longer to eat it and you wont be tempted to go back for three or four more because it will fill you up, unlike three or four more cookies, .-4(4).

Large Portions, Large Bellies

Another significant change that has been seen in the eating habits of Americans has been portion size. Portions are now about three times the size that the human body needs. Americans feel they need to get their moneys worth and they want to eat everything that is on their plate because they paid for it, -3(4). Many people go out to eat on the weekends and they could walk into a steakhouse and eat a 16 ounce steak with a mountain of mashed potatoes to go with it, -3(4). Dont forget the endless, free refills of soda beverages, too. In 1978, the average teenage boy drank 7ounces of soda a day. Today he drinks nearly three times as much. This same trend has been seen in teenage girls as well, who have doubled their intake of soda per day. Twenty five years ago teens drank twice as much milk as they did carbonated beverages, but now that ratio is reversed, -6(54). Weight gain could be controlled very easily if people just watched the amount of food that they eat. Instead of eating every morsel on the plate, ask for a to-go box and eat the other half of the meal the next day. This practice will also save money in the long run. And it is not necessary to completely omit ones favorite foods, but portion control can really go a long ways when it comes to losing weight or maintaining a healthy weight.

One obvious and large contributor to the major weight gain of Americans is the change in life style. Advancements in technology have allowed them to move off of the farms and into large cities where they now work office jobs. Millions of Americans drive to work every day, take the elevator up to their floor, and sit in front of their computer until their lunch break. At that point they typically go out to lunch with some colleagues and then return back to their cubicle. When the day is over they take the elevator down to the first floor, get in their cars and drive home. While these changes are nice and have their benefits, they simply do not force a person to be very active like in times past. Its not just adults whose lives have become less active, but childrens as well. The typical American kid watches TV an average of 21 hours a week, not including playing video games or watching movies, -6(46). About 25 percent of 2-5 year olds have a television in their room. Even kids, the ones who have the most energy, are less active than they used to be. It doesnt take much to be active and burn off some energy. The US Surgeon General recommends at least 30 minutes of moderate exercise every day, which could be simply walking the dog through the neighborhood, -4(4).

The Target Market: Kids

One of the biggest changes in the food industry is the shifts in advertising. The food industry has now started advertising and marketing toward kids, .-6(3). The average American kid sees more than 10,000 food advertisements on TV a year. And of those 10,000 ads, 95 percent are for cereal, pop, fast food, or candy,.-2. Thirty years ago only a small amount of American companies directed their advertisements towards children, but today almost all companies do this. Studies show that small children can recognize popular brand logos before they can recognize their own name,.-6,43.. Companies realized that children have a large influence over their parents. The kids see the advertisements, go to their parents and beg them to buy that product for them. Some of the tactics that are used in the fast food industry are things such as toys, playgrounds, and characters like Ronald McDonald.

McDonalds Corporation now operates more than eight thousand playgrounds at its restaurants in the United States. Burger King has more than two thousand. A manufacturer of playlands explains why fast food operators build these largely plastic structures: Playlands bring in children, who bring in parents, who bring in money.

Every month about 90 percent of American children between the ages of three and nine visit a McDonalds. The seesaws, slides, and pits full of plastic balls have proven to be effective lure, .-6(47).

Aside from the playgrounds, kids are also drawn to the toys and the characters. Its no secret that kids love toys and the food industry has capitalized on this fact. Most fast food restaurants offer a kids meal that comes with a small toy and when these companies advertise the new toy sales always increase in the kids meals,.-2. Morgan Spurlock surveyed five first graders by showing them pictures of several famous Americans. Most of them could not identify George Washington or Jesus, but every single child could identify Ronald McDonald,.-2, 4.

The food industry goes out of its way to make sure that the American public sees its advertisements and buys into them. A study shows that in 2001 McDonalds spent \$1.4 billion worldwide on direct media advertising which includes radio, TV, and print. Pepsi spent over \$1billion and Hersheys spent nearly \$200 million on

these same advertisement methods,.-2. In its peak year of advertisement, the Five Fruits and Vegetables Campaign spent a lowly \$2 million dollars on all advertisements, not just direct media advertisement,.-2. It is not surprising that the foods that are advertised the most are the foods that are purchased the most.

Not only is fast food pushing marketing more now than ever, but its marketing is now in our childrens schools. Many middle schools and high schools across the country offer child favorites such as chicken fingers, French fries, burgers, ice cream, cookies, fried burritos, chips, soda, tater tots, chili cheese fries, and pizza. A lot of this is not branded fast food, but can still be classified as such because it is fried, broiled and loaded with sugar. However, several schools do have branded fast food in their cafeterias. The food chains make deals with school districts and offer funding for sports and other events in the schools. In return the companies ask that they be allowed to advertise and sell their products in the schools that they are helping to sponsor, .-6(51). These companies advertise in schools through promotions, games, and contests which they offered to the students and the community. Morgan Spurlock visited several schools during the filming of his documentary and he found that most schools claim that they are doing the right thing for the students. The schools say it is up to the student to make the right decisions on what to eat and that the student could choose to buy an apple and a sandwich instead of french fries, cookies, and a coke, .-2.

Schools do not want to discontinue these fast foods to their students because they do not want to lose the funding they receive from the food companies. Likewise, the companies object to the banning of their products in schools because they want to make as much money as possible. Kids are one of their largest customer pools.²

However, there are some schools that are trying to change this unfortunate norm in America. The Appleton Wisconsin School District is one district that does offer entirely healthy, rounded meals to its students. The cooks prepare the food from fresh, raw ingredients. There is more baking and preparation involved. And, perhaps most important, they do not offer any soda or sugared beverages for sale at all.² The Appleton School District also says that this fresh food method costs about the same as pre-packaged, frozen and prepared meals which so many other schools offer.

Education as Protection

If schools assume that most middle school and high school students already possess the knowledge to make the right decisions on what to eat, then based on how these students are showing their knowledge it is clear that they need to increase education on the matter. Many students really dont have a good understanding of nutrition and being healthy. Jones suggests that it is best to follow the 5 to 1 method. Eat five times as much fruits and vegetables as you do protein, in weight, .-9(41). When this method is followed, one will automatically be eating healthier and getting the variety of food that he needs. People also need to watch their caloric intake. Calories come from four sources: carbohydrates, proteins, fats, and alcohol. The most calories per gram are packed into fats with 9 calories. Alcohol follows with a close second containing 7 calories per gram of alcohol, .-9, 30., 10.

The basics of a healthy diet are not difficult. Americans just need to have a better knowledge and understanding of what to eat that will best benefit them. It is recommended that each person gets at least 55 percent of his daily calories from carbohydrates, preferably complex carbohydrates. These are foods such as whole grains, vegetables, and fruits. Protein should only constitute about 12-15 percent of the daily calories and should come from lean sources. This means avoid cheeseburgers and steaks with a lot of marbling. Also, it

is recommended to try to limit sodium intake to 2,400 milligrams per day, which is not a lot, and avoid sugary foods,.-10(12?13).

It is perhaps most important to talk about fats since fast food is saturated with it. Fat contains about twice as many calories as carbohydrates and protein, .-10(24). The best kind of fat is unsaturated fats that come from plants and fish. The worst fats are saturated fats that come from animals, .-10(25). Most fast food has saturated fat because it keeps longer and doesnt spoil as fast. Saturated fat is a big contributor to high cholesterol, which can cause arteries to clog and cause heart failure. Over all, try to eat as many fruits and vegetables as possible and stick to eating fish or poultry. Avoid red meat when possible or eat it only on special occasions.

Correlating Health Problems and Their Increase in Numbers

Heart Disease, Diabetes, and Cancer

Countless studies and reports have proven that being over weight or obese increases the risk of heart disease and countless other health problems. A small list of health problems associated with obesity includes but is not limited to: hypertension, cardiovascular disease, diabetes mellitus, gall bladder disease, gout, osteoarthritis, pulmonary disease, renal disease, fatty liver, coronary artery disease, and heart attacks,.-4, 1., 11(40). Approximately 300,000 people die each year from illness that are related to obesity and unfortunately mortality increases as excess weight on the body increases,.-12,246.,11.

One of the biggest topics of discussion is hypertension. Hypertension is most simply having a high blood pressure. Statistics show that hypertension is more prevalent in obese people than in normal weight people, .-11(40). When someone has high blood pressure it means that the blood is flowing at an increased volume in comparison to the size of the arteries, which puts a lot of strain on the heart. The adipose tissues, or fat cells, on over weight individuals means miles more capillaries for the blood to flow through and this just puts added stress on the heart, .-12(572). Hypertension causes increased cardiac work as well. Cardiac output is elevated in obese people because their stroke volume is higher. Output equals stroke volume times the heart rate, .-11(43). The stroke volume is higher because there is more body mass for the blood to deliver oxygen and nutrients to, which causes extra work for the heart. If hypertension continues to elevate, it could lead to an enlarged, weakened heart, which leads to an aneurysms. The ultimate stopping point is death, .-12(572).

Another very common health problem seen in obese individuals is diabetes mellitus or type 2 diabetes. Type 2 diabetes makes up 90 percent of all diabetic cases and 80 percent of those with type 2 are over weight, .-5(189). One out of every twenty people in the United States has diabetes, .-2. It ranks number seven among the leading causes of death in America and is more likely to develop in an obese person than in a normal weight individual, .-12(577, 247). In type 2 diabetes fat cells do not respond to insulin as well as they should, so the pancreas is stimulated to make more insulin which raises the blood glucose levels because the fat cells are not able to take up the glucose. Eventually, type 2 diabetes develops, .-12(578). This disease is characterized by high blood glucose levels, abnormal insulin secretion, and insulin resistance.

It used to be that type 2 diabetes was mostly in older adults who were over weight. In the past 25 years, the number of adolescents and young people with type 2 diabetes has skyrocketed. Because children are constantly eating fast food and eating a lot of it, they are putting on extra weight. This extra weight can in turn lead to diabetes. There is a direct correlation between these two variables. A study also showed that direct medical costs related to diabetes have doubled in the past five years, as of 2002; having spent \$44 billion in

1997 and \$92 billion in 2002,.-2. If trends continue as they are, studies show that one out of every three children born in the year 2000 will develop diabetes at some point in their lifetime,.-2. If a person gets diabetes before the age of fifteen, statistically he loses 17-27 years off of his life.² These numbers are staggering and should cause concern to people who have not been careful about what they are putting into their mouths. For many people type 2 diabetes is something that can be avoided. It all comes down to what a person decides to put in his own mouth and what he does with his body.

There is also a correlation between extra weight and many cancers, although the exact reasons for the correlation are not fully understood. According to a 16-year-long study, over weight and obesity may account for 14 percent of all cancer deaths in men and 20 percent in women, ."-4(2). One example of a cancer enhanced by extra weight is prostate cancer in men. The risk of death from prostate cancer rose by 8 percent in men with a BMI of 25-30, 20 percent with BMI of 30-35 and 34 percent with a BMI over 35, .-4(2). This tells us that increased weight definitely increases risk for certain cancers. A different study also showed that men who eat the most calories were 3.8 times more likely to develop prostate cancer in the first place than those who eat a lower amount of calories, .-4(2). It is also known that extra weight increases infertility and sexual performance in men.

Shortened Lifespan

Extra body weight has great affects on a persons lifespan. Since bodyweight is a factor in longevity it is important to be aware of your own physical condition, .-11(152). It is normal to gain weight as you get older, but not healthy to gain excessive amounts of weight because the older you become, the more problematic it can be to your physical health to have excessive weight. It can bring an onset of numerous problems for you. A 25-year-old man who is morbidly obese can expect to lose about 13 years of his life and a 40- year-old man who is just overweight can lose around 3 or 4 years from his life, .-4(1). Several authors agree that people who are obese as children likely will be obese for the rest or a large majority of their lives, .-11(156). This shows that obesity can be brought on by eating habits and what you learn from an early age. Adults should take some responsibility in teaching their children to make better food choices early in their lives so the children can carry that knowledge on with them throughout their adulthood. One suggestion is to limit the amount of times you take them to McDonalds or any fast food restaurant. When a parent takes his child to a fast food restaurant three times a week he is teaching the kids that it is okay and acceptable to eat fast food often; theres no harm in it.

There is a clear and distinct connection between child obesity and the rise of the fast food world. Because children visit fast food restaurants so often, and it has been determined that excessive amounts of fast food is not healthy, it is not surprising to see that children are paying the consequences with their own health. According to several studies, there are many reasons why children are becoming more over weight than in the past. Some suggested reasons are excessive snacking and a fast food diet,.-13. Americans spend an average of \$1 billion dollars a day on snacks, which turns out to be the equivalent of a fourth meal,.-13. And although Taco Bell has even capitalized on this notion of a Fourth Meal in the middle of the night, it really is not healthy for you. A large portion of this billion dollar fourth meal is being accounted for by children. They are surrounded by vending machines in their schools that are filled with sugary beverages and candy snacks.

The numbers of childhood obesity and overweight are startling. Children should be some of the healthiest people and yet they are being diagnosed with diseases related to weight as early as three or four years old. According to the Center for Disease Control (CDC), the percentage of overweight children in the United States

has doubled since the 1980s and the trend is even worse for adolescents. They have risen by more than 300 percent, .-13. One out of every five children in the United States between the ages of six and seventeen are considered to be overweight. About 25 percent of white children and 33 percent of African children are overweight, .-13. The increase in health problems are there to prove these numbers, too. Of the children with type 2 diabetes, 85 percent of them are obese. 20 percent of the newly diagnosed cases of childhood diabetes turn out to be type 2 diabetes, .-13. Normally, children with diabetes would typically have type 1 diabetes, not type 2. These illnesses are being seen across the board and should cause great concern to every one who cares about his health or the health of his family.

Other Contributors of Obesity

These statistics show a clear and sad connection that cannot be ignored. Americans are eating too much of the wrong foods and they are hurting themselves by doing it. Although genetics do play a role in being overweight, the blame cannot be put solely on this. It takes thousands of years for genes to modify themselves; the rise in obesity has just happened within the past thirty to forty years, .-13. Most of the blame should go toward our diets- diets that are full of fat, sugar, and empty carbohydrates.

It is true that diet is not the only factor that can cause a person to be overweight or obese. One important factor can be genetic predispositions. The role of hormones is being studied closely to see the correlation between hormone secretion and eating. Many scientists believe that these type of hormonal signals are what give a person the urge to eat and they believe that obese people may have an imbalance in these hormones that causes them to over eat, .-3(2). One example of a hormone that controls appetite is Leptin, stimulating the hypothalamus, which controls appetite. A study done on mice showed that obese rats could not produce leptin and they continued to gorge on food, never stopping. In turn, the mice gained weight. When the scientists gave the mice leptin, their appetites suppressed and the weight eventually came off, .-3(2). This would suggest that obese people may have a problem producing leptin and that contributes to their being overweight. They never feel as though they are full.

Another argument for genetic predisposition to obesity is ancestry. In many cultures of the world, people had to worry about survival during periods of famine or drought. Their bodies were genetically modified to be able to make it through the long periods with no food. One example is the Pima Indians. The Pima tend to be more overweight than most people. Their fat cells are expanded and try to store as much fat as possible which puts extra weight on their bodies. This happens because their ancestors, thousands of years before, had to survive long periods with no food; their fat cells stored extra fat automatically,.-5(184).

Each person is born with a given number of adipose tissues. When a person gains weight, the cells expand and if too much weight is gained the cells multiply. Once fat cells are created, they can never be destroyed. It is well known that fat cells product many substances that are necessary for life, but when you have enlarged fat cells, these substances may be released in larger quantities into your body, .-14(50). Some doctors may suggest that these excessive amounts of chemicals and hormones may be what lead to the related health risks of obesity and some people are genetically wired to be heavy set or more overweight than others, .-14(50).

In some people, obesity may be due to defects in the hypothalamus. Tumors or a lower amount of neurotransmitter receptors may affect the proper functioning of the hypothalamus, thus having an affect on a persons appetite, .-5(186). Although some cases of obesity can be attributed to this disorder and others similar, most cases of obesity in America can be attributed to the simple facts of over-eating and eating too much

fast food.

There are other factors that contribute to obesity, but this disease has become such an epedimic in America because we eat out and seem to over eat often. Our choices to grab a burger or eat a 16 ounce prime rib are hurting our health. If we can start to get a control over this crisis and make it smaller, then we will be adding many healthy years back on to our lives and will reduce many illnesses that are realated to obesity. But once we do get a grip on the fast food world in which we live, there is still the issue of physical activity and exercise that could be addressed. Losing weight and being healthy is never easy, but the solution to this problem does not need to be surgery or ridiculous weight loss schemes. Each year Americans spend more than \$30 billion dollars on diet products and weight loss programs. They are spending twice as much money on these products than on health and exercise, .-2. If people would put more conscious effort into watching watch they eat and how much, and put in about thirty minutes of physical activity into their days, then this problem with obesity would dramatically decrease and not get larger so quickly. It is obvious that Americans wants to lose the weight, but we want a quick fix. The best way to lose the weight and gain a healthier life is by putting in the effort. It takes hard work to exercise and be conscious of what you eat. Something worth having is worth working for and I believe our personal health is worth the effort.

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