Bachelor's thesis

Hospitality Management

Double Degree Program

2013

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CULTIVATING CHILDHOOD OBESITY

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BACHELOR´S THESIS | ABSTRACT
TURKU UNIVERSITY OF APPLIED SCIENCES

Degree programme in Hospitality Management| Double Degree Program

Spring 2013|Total number of pages 35

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In recent years the levels of obesity in the United States has risen greatly especially amongst children. Doctors, psychologists, and other scientists have been studying the growing problem for years. Implications for childhood obesity not only have enormous physical consequences but emotional repercussions which can affect the child's academic and social development. A number of factors have been identified as having an effect on these children; family life reveals the grocery store habits of American families. Many of the children identified unhealthy snacks and meals as a regular part of their daily food intake. High sugar cereal and sodas were listed as favorites of not just the children, but of the parents as well. The causes of obesity are cited as unhealthy eating habits, lack of exercise, and genetic predisposition. Approximately, 15% of American children from the ages of 6-19 are overweight or obese while the levels of obesity in European countries while on the rise tend to be considerably lower. While these characteristics, along with a sedentary lifestyle, can lead to childhood obesity; this thesis aims to uncover other factors believed to contribute to these growing levels overall. Such as respective nutritional standards, cultural food norm differences, student lunch programs, local food and beverage industry practices, government subsidies, and the legislation of non-core foods i.e. "Junk food" marketing to children.

KEYWORDS: Childhood obesity, nutritional guidelines, child marketing, food legislation, food norms, government subsidies

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1 INTRODUCTION

1.1 Background

Looking back to the days of the Great Depression American farmers have been the recipients of government subsidies created to stabilize crop prices in an effort to maintain an affordable and steady food supply for American families. Critics say that these programs have had an unintended side effect; while successfully carrying out what they were intended to do these polices have contributed to current levels of obesity as well as other nutritional problems. According to James Tillotson a professor of food policy and international business at Tufts University, United States policy encourages obesity at the expense of sound nutritional practices. US Farmers have become most efficient at producing subsidized crops such as soybeans, wheat, and corn. (Fields 2002, 822)

Because these crops are highly regarded in economic terms farmers have neglected producing other fruits, vegetables, or other crops. The market has also become flooded with sweeteners in the form of high fructose corn syrup or HFCS which in turn has driven down the price of processed pre-packaged snack foods, fast food, soft drinks and some ready to eat meals. In the defense of subsidies other researchers cite other factors they consider to be more of a contributor the rising obesity levels, longer work weeks and more households where both parents work. These factors in turn create latchkey children that are left home alone until one or both parents return from work leaving less time for balanced home cooked meals to be served.

Larry Mitchell CEO of the American Corn Growers Association in Washington, D.C. believes it is making quite a leap when attempting to connect farm subsidies to obesity. He concludes that when you compare the data with the theory it just doesn't match up. The sheer number of factors involved makes it difficult to isolate a connection between subsidies and obesity but this has not

stopped attempts to eliminate farm subsidies altogether. In 1996 the Freedom to Farm Act eliminated crop subsidies and was replaced with a procedure that now gives farmers a set amount determined by what they had produced in earlier years. According to Richard Wiles Sr. Vice President of the Environmental Working Group this procedure is fatally flawed because it enabled everyone who received subsidies at that time to continue to receive them forever whether or not they grew anything; In essence turning the commodity payments into the commodity itself.

While the intended purpose of subsides is to keep the price of food down the result has led to a more significant price difference between high fat and sugar foods and fruits and vegetables. Which seems disproportionate when considering the ratio of income required to purchase food in the US is among the lowermost in the world and increasingly falling. With sales of HFCS increasing and subsidy payments having risen from 22 billion dollars in the year 2000 to a scheduled 190 billion dollars in 2012 it cannot be considered a coincidence that American waists have kept pace. (Fields 2002, 823)

1.2 Aim and Objective

The primary aim of this thesis to determine to what extent factors such as nutritional standards, school lunch programs, government subsides, and legislation of marketing non-core foods to children have affected obesity levels in the United States and the European Union. As opposed to those cited causes of obesity such as unhealthy eating habits, lack of exercise, and genetic predisposition. In examining these factors more closely the aim of the thesis is to ascertain the extent of their impact on childhood obesity so that a global plan of prevention measures may be attempted. The main objective is to find out what fosters epidemically high levels of obesity in children in the United States of America compared to those of the European Union. The research question can be described:

What are the factors that affect current levels of Childhood obesity in United States of America compared to the European Union?

1.3 The Methodology in this Thesis

The qualitative approach has been used for this thesis as the primary method. Source materials have been gathered from interrelated web sites, scholarly journals, books, periodicals, as well as other essential publications. These materials have contained vital facts relating to subject matter herein. Desk research uses published sources, and or the views and data from industry researchers, respective frontrunners, and employees own internal sources. Because this process is performed prior to a research project with the analysis often time integrated into the overall findings, helping to bring together the most essential points of the objective. Using this method gives the advantage of proficient Scholar's having located and collated vital information. This method also has disadvantages; the time in which research was done may lead to information that is outdated. The information also could not be specific enough the focus may be outside the realm of pertinent findings for the subject matter being explored. Also the quality of the research must be considered how controlled was research environment leaving the opportunity for research to be scrutinized.

The Secondary method has been empirical data. In this case, we consider and analyze the school lunch guidelines, menus, and implementation of these to school aged students of the United States student and of Scandinavian region. As well as a discussion of children's' purchasing habits in a focus group environment. Also some descriptive and causal research methods were employed; to meet the requirement of diverse research. These methods included some descriptive research of obesity as a medical condition in addition to discussions of given causes. The descriptive method lends itself to describing its history, features, and level of the problem more clearly. Additional the causal method determines which influences or variables contribute to a specific

behavior. We believe both methods are useful to this thesis as it focuses on the problem of childhood obesity and the behavior relating to the epidemic in the United States and Europe.

2 OBESITY AND SCHOOL LUNCH NORMS

2.1 Dietary Guidelines for Americans

According to the US National Institutes of Health, obesity and overweight together are the second leading cause of preventable death in the United States, close behind tobacco use. An estimated 300,000 deaths per year are due to the obesity epidemic. Obesity results in an approximate cost of $117 billion dollars in the US alone (CDC, Preventing Obesity and Chronic Diseases).

200 years ago, 97 % of Americans lived and worked on farms. During this time they were getting an abundance of exercise, needed an abundance of calories, and partook in obtaining those calories in whatever form was available. So the traditional American diet tended to be full of things such as breaded beef and pork, bacon, eggs, cream, sausage, lard, and butter; high calorie, high fat, foods were needed to maintain energy levels while working the farmlands. Because most people died of contagious diseases or injuries before they were 47 years of age, most people never worried about the effects of obesity, coronary artery disease, or cancer. Although the intake of these high calorie foods are no longer necessary because the majority whom continue to consume such large amounts are not employed as farmers, yet the tradition still remains. (Juiler 1999, 71)

According to the latest version of Dietary guidelines for Americans issued in 2010; the publication is a joint effort between US Department of Health and Human Services and the US Department of Agriculture on the basis of providing the most current scientific evidence, information and advice for selecting a healthy diet plan. Specifically this should be a diet that is full of nutrient dense foods and beverages that will contribute to achieving and maintaining good health overall. In addition this should also support measures to insure food safety principles to avoid cases of foodborne illness.

Unlike the previous version of this publication it delves in depth on the issue of obesity. Stating plainly that one of the largest changes has been the increased number of Americans that have entered into the obese category; and in some cases, the occurrence of obesity has doubled tripled between the years of the 1970s to 2008.

Table 1. Obesity in America … Then and Now

TABLE 2 1. Obesity in America ... Then and Now

Obesity Then	Obesity Now
In the early 1970s, the prevalence of obesity was 5% for children ages 2 to 5 years, 4% for children ages 6 to 11 years, and 6% for adolescents ages 12 to 19 years.	In 2007–2008, the prevalence of obesity reached 10% for children ages 2 to 5 years, 20% for children ages 6 to 11 years, and 18% for adolescents ages 12 to 19 years.
In the late 1970s, 15% of adults were obese.	In 2008, 34% of adults were obese.
In the early 1990s, zero States had an adult obesity prevalence rate of more than 25%.	In 2008, 32 States had an adult obesity prevalence rate of more than 25%.

Sources:
Flegal KM, Carroll MD, Ogden CL, Curtin LR. Prevalence and trends in obesity among U.S. adults, 1999-2008. JAMA. 2010;303(3):235-241.
Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among U.S. children and adolescents, 1999-2000. JAMA. 2002;288(4):1728-1732.
Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in U.S. children and adolescents, 2007-2008. JAMA. 2010;303(3):242-249.
Centers for Disease Control and Prevention. U.S. Obesity Trends. Available at: http://www.cdc.gov/obesity/data/trends.html. Accessed August 12, 2010.
[Note: State prevalence data based on self-report.]

According to the publication, the overall environment in which many Americans now live, work, learn, and play has contributed to the obesity epidemic. Although, individuals ultimately choose what foods they consume and the quantity as well as how physically active they are. Choices are frequently restricted by what is accessible in their local communities in terms of stores, diners, workplaces, and school cafeterias. Location affects both sides of the calculation of calories. It is possible to support overindulging in calories while at the same time daunt physical exercise and activities.

According to the publication the food supply has transformed radically over the past 40 years. The availability of foods for consumption has increased in every major food classifications from 1970 to 2008; with the average daily calories accessible per person in the marketplace enlarged by nearly 600 calories. The greatest increases being achieved by added oils, grains, milk products, and

caloric sweeteners. Numerous portion sizes offered in most institutions also have increased. Research has shown that when larger portion sizes are served, people tend to consume more calories. In addition, strong evidence shows that portion size is a direct correlation to overall body weight, in the same way that being offered and consuming lesser portions is associated with overall weight loss. The current dietary intake of Americans has contributed to the obesity epidemic. Many children maintain a normal calorie consumption that exceeds their daily needs on the basis of national survey data, the average calorie consumption among children younger than 19 years of age are projected to be between 1,785 and 2,640 calories per day. (Dietary guidelines for Americans, 2010)

In order to address the issue of obesity the publication put forth key recommendations and guidelines such as monitoring caloric intake which studies have shown to aid individuals develop awareness of what and how much they are consuming. It was also suggested that smaller portion sizes be ordered and if that option was not possible to split a larger meal between two persons, or take the remaining portion of the meal home to be consumed at a later time. Importance was also given to reviewing the calorie content of foods and beverages presented in an attempt to select the choice with lower calories. It was also noted that most Americans do not eat a nutrient dense breakfast or breakfast at all. Studies associate not eating breakfast with levels of excess body weight particularly amid adolescents and children. In regards to children and adolescent's television viewing, children and adolescents have been encouraged to spend less than 2 hours each day watching television, playing video games, or using other electronic devices such as a computer or smartphones. Eating while watching television can result in overeating and should also be avoided. Main focuses have been placed on the two main components, calories consumed and calories expended. These two elements are imperative in succeeding and sustaining a suitable body weight throughout one's lifetime while also having broad consequences for the health of Americans. Improved nutrition, appropriate eating behavior and increased physical activity has remarkable potential to decrease the prevalence of

overweight and obesity while improving overall the public health of Americans. (Dietary guidelines for Americans, 2010)

2.2 Obesity in Europe

Studies measuring food intake have been recorded since the beginning of the twentieth century in Sweden during this time malnourished and underweight citizens were common; since then both nutrition and health have improved (Samuelson et al. 1975, 242.) In Sweden as well as other countries, levels of obesity and overweight citizens have been shown to increase at school ages. Risk factors such as cardiovascular diseases have been found in young adolescents also having been identified as a risk factor for later development of obesity as well as type-2 diabetes. (Garemo, Lenner, & Strandvik, 2006, 266)

In a Finnish study as well as Norwegian reports state that low intake of fruits and vegetable was associated with high sugar consumption. More recently Swedish children at preschool were found to have a lower energy intake than recommended; later studies this was found to be compensated for at home, which provided results in line with total energy intake recommendations according to the Nordic Nutrition Recommendations published in 1996. (Talvia et al. 2006, 176)

In Recent times studies have been completed on the food consumption habits of children from Sweden, Czech Republic, England as well as 12 other countries around Europe on infants and toddlers. The comparison between these studies is troubled by differences in the research methods used, as well as differences in reported food categories. However, food intake trends are able to be compared. The assessment of the intake of nutrients in children and adolescents in 23 European countries revealed vast variations among the countries. The overall total calorie consumption increased with the child's age and was higher for boys than for girls. Consumptions of nutrients were correlated with calorie intake. Throughout the past 2 decades the consumption

of total fat, sugar, sodium and cholesterol among European children under the age of 7 years has exceeded the recommendations. (Lambert, Agostoni, & Elmadfa, 2004, 166)

In recent times the Mediterranean diet was representative of foods customarily consumed by the inhabitants of Europe's southern region. Because of it being linked to better health since the 1980s some Nordic countries regarded Mediterranean nutritional pattern as a healthier alternative to existing diets that had been promoted to improve public health. (Olsen 2011,640)

In Finland obesity is a developing problem, the total body mass index or BMI coupled with the occurrence of obesity has increased in both women and men over the last 10 years. The rising tendency has been most noticeable in the young adult age group those who are ages 25 to 34 years of age. Tendencies of obesity have drawn its greatest concern among children and adolescents. In this group the increase in the frequency of overweight children has been more rapid than in young adults. Occurrences of overweight boys and girls have more than doubled in the last 20 years.

Presently about 20 percent of boys and 10 percent of girls aged 12 to 18 years are considered overweight on the origin of personal information given on weight and height. Small sample studies sizes and local analyses show up to 10 to 20 percent of school age children are estimated to be overweight; countrywide statistics on weight and height of young Finns were not presented. When determining normal weight education is a firm influence particularly in women. It has been shown that women with lower levels of education display most unfavorably amid levels of obesity. Contrary to women, men have shown an increased BMI irrespective of their level of education. The frequency of obesity, nevertheless, is highest amongst men with the lowermost level of education.

Correspondingly as the levels of obesity continue to increase, the levels of residents consuming salty, fatty and sugary snacks, as well as sodas, sports drinks, and alcohol has also increased. Giving further credence to the causes the have augmented occurrences of obesity. According to the Article Nutrition in

Finland these are believed to include: changes in the living environment, decreased physical activity, larger portion sizes, as well as an increase in eating habits that are not in accordance with the current dietary recommendations. The Finnish Consumer Agency and Consumer Ombudsman together with the National Public Health Institute have responded to this discussion by preparing a new recommendation for advertisers, entitled Children and Foodstuffs Marketing. These recommendations were launched in October 2005. (Hawkes, 2004,21)

Food habits have changed remarkably in Finland throughout the past years. In earlier years the Finnish diet was largely based on grains, milk products, and potatoes. While the consumption of grain and starches has dropped, the consumption of animal products has improved. The consumption of vegetables and fruit has also steadily increased. In everyday life the supply of foods has broadened significantly. Globalization becomes visible on the supermarket shelves and shopping carts are filled not only with domestic foods but also with foods that have been imported from all around the globe. Goods that were once thought to be luxuries have been converted into everyday possessions. (Hoppu et al. 2010).

Although Finns have access to more choices of healthy food than ever; the difficulties of scarcity of food has transformed to a diet of excess. The growing food culture in Finland has embraced foreign and ethnic influences. Foods such as pizza and kebabs are growing more familiar and popular than the people of Finland could have assumed years ago; leading some Finnish natives to feel that authentic Finnish foods and practices are vanishing. (Kuhnlein,& Receveur,1996,424)

According to the National FINDIET 2002 Study the average daily diet consists of six eating occasions, including one main meal. About 60% of the daily energy derives from the main meals, and the rest from snacks. Moving snacks into a dominating eating pattern that is typical for one fifth of men and one quarter of women. This eating pattern has been associated with the growth and urbanization in men, women and children equally.

2.3 School Lunch Norms

In 1946 President Harry Truman signed the National School Lunch Act into law. I believe it is safe to conclude he did not anticipate that American schools would today be serving such things as chicken fingers, frozen French fries, mushy pizza and ketchup being considered a vegetable instead of a condiment. In 1966 A new dimensions was added to school food services with the enactment of the 1966 Child Nutrition Act. According to the United States Department of Agriculture's website in its Declaration of Purpose in Section 2 of the Act, the Congress stated,

"In recognition of the demonstrated relationship between food and good nutrition and the capacity of children to develop and learn, based on the years of cumulative successful experience under the National School Lunch Program with its significant contributions in the field of applied nutrition research, it is hereby declared to be the policy of Congress that these efforts shall be extended, expanded, and strengthened under the authority of the Secretary of Agriculture as a measure to safeguard the health and well-being of the Nation's children, and to encourage the domestic consumption of agricultural and other foods, by assisting States, through grants-in-aid and other means, to meet more effectively the nutritional needs of our children." (1966 Child Nutrition Act)

In 2010 The Healthy, Hunger-Free Kids Act was introduced According to the USDA website it allowed the USDA, for the first time in over 30 years the opportunity to implement real reforms to the school lunch and breakfast programs by improving the critical nutrition and hunger safety net for millions of American children in the chart below you can see examples of changes that were implemented with the new act. (The Healthy, Hunger-Free Kids Act, 2010)

In 1948 Finland became the first country in the world to serve free school meals. Legislation contributing to these meals leaves the municipalities responsible for regulating and observing them. Statutory obligations are based on The Basic Education Act, The General Upper Secondary Schools Act, and

The Vocational Education and Training Act. The common denominator between these three is to provide free school meals every day.

In Section 31 of the Basic Education Act details how students attending school must be provided with a properly pre-prepared meal free of charge each school day. Finland school meal services are unique in that free lunches are served at comprehensive schools as well as at upper secondary schools and vocational institutes every working day. (National Public Health Institute, 2006)

According to Nordic recommendations school lunch should meet a third of each student daily nutritional requirements. A law was passed in the1940s that required the free lunches for all students at elementary schools as years progressed this standard was applied to all levels of primary and secondary schools. Additionally, university students acquired subsidizes meals in 1979.

Picture 1. The Finnish food plate model. (http://indulgy.com)

3 LIFESTYLE AND OBESITY

The research of Davis (2004,159) reveals that the rise in obesity among minority groups such as African-Americans and Hispanics is greater than that of white children living in the United States. According to the research, ethnic minority children have a one in two chance of becoming diabetic while their white counterparts have a one in three chance of getting the disease as a result of obesity and weight problems. Davis explains (2004,159) that more and more research is being done on the physiological effects of obesity. Studies show that obese children often become obese adults. By the time these adults are in their mid-20s many of them find themselves coping with issues of diabetes, kidney failure requiring dialysis, higher mortality, and eventually heart attacks. These scientists predict that heart failure among young adults in their twenties will become much more prevalent as obesity rates in children continue to rise.

3.1 Social and cultural facts to obesity

However, according to Davis, (2004,159) the physical effects of obesity are not the only factors in the lives of those who suffer from serious weight issues. Sociologists, behaviorists and other professionals note that there are definite links between obesity and culture. Ethnic minorities exhibit behaviors which can lead to problem with health and nutrition. These researchers note that because little is known about the factors among ethnic groups which lend themselves to obese children, scientists have been unable to address these specific issues, and many treatment plans which may offer these children and their families some hope, have routinely failed.

Davis and her colleagues (2004,161) attempt to focus on these social and cultural links to childhood obesity. A number of factors were identified as having an effect on the children in the study. These children were approximately 8-11 years old and at least 20lbs overweight. Davis identifies certain factors as

affecting the weight of the participants: Weight Wishes, Peer Relations, Family Life, Favorite Foods, Entertainment and Physical Activities, and Weight Reduction Activities. In Weight Wishes, the children responded to the following question: if you could look anyway you wanted to look, how would you change yourself? Many of the children responded that they would, of course, make themselves thin. Under Peer Relations, Davis (2004,161) notes how important friendships and associations with children who are not overweight are to the children. Many of them also responded that they had formed friendships based on the fact that both children were overweight. Family Life reveals the grocery store habits of the families involved in the study. Many of the children identified unhealthy snacks and meals as a regular part of their daily food intake. High sugar cereal and sodas were listed as favorites of not just the children, but of the families as well.

In terms of Entertainment and physical activities, most of the children cited computer games, video games, and watching television as the type of activities they enjoyed most frequently. A few did cite bike-riding, basketball, and other sports as activities they enjoyed, but most of them listed more sedentary activities as part of the daily routine. Finally, the researchers probed the kids about their understanding of how to lose weight. The responses were varied. Many of the children talked about changing their diets. They explained that eating cookies, ice cream, cake and other sweet snacks were not healthy and did not help one to lose weight. They also noted that eating in the middle of the night was adverse to weight loss. Others noted that eating vegetables at dinner and before eating a dessert was also important to weight loss. Some explained that drinking weight loss shakes and other nutritional/diet aids played a role in losing weight. These issues also reveal how African- American children experience obesity. (Davis & Davis 2008, 161)

3.2 Children in disadvantaged neighborhoods

According to Davis' research (2004,161) many of the children may desire to lose weight, but lack the support from adults at home and at school to make this desire a reality. In school, the lack of a physical education program greatly impacted the knowledge level of children who were obese. With no formal training about nutrition and exercise, many of the kids displayed confusion and ignorance about how to lose weight or how to maintain good health. At the grocery store, many of the children explained that they were allowed to pick their own high fat and high sugar snacks without any adult interference. They also said because they were required to prepare much of their own food, as parents worked, they tended to replicate the high fat and high sugar foods given to them at school or church.

Davis (2004,162) concluded that many factors which affect these ethnic groups such as lack of good PE programs in public schools, lack of parental supervision as parents worked long hours to maintain their households, and lack of information and support in the communities themselves led to greater incidences of obese and overweight children in African American and Hispanic ethnic groups. Although Davis' article provides much information about obesity in African-American children, Dr. May Lutfiyya (2008,192) explains that this problem requires much more attention and research before the medical community can make any scientific conclusions. Dr. Lutfiyya and her team of researchers examine the major risk factors for obesity among certain minority groups. Nutrition practices, child activity levels, genetic and metabolic factors, and socio-economic disadvantages all play a serious role in the health and welfare of overweight children in these ethnic groups. This article explains that many disadvantaged socio-economic minorities do not receive the proper education about nutrition and health. These communities lack a structured health care facility which could provide the most recent information on maintaining good health and healthy methods of weight loss. One would be forced to leave their neighborhood to fully take advantage of some of the free programs available to educate families and children alike. As stated in the Davis

article, child activities are less physical in these families. Children tend to prefer sedentary activities such as computer and video games.

Lutfiyya (2008,196) expands on these conclusions and explains that children who live in disadvantaged neighborhoods may not find soccer fields, baseball fields, basketball courts, tracks or other places of physical activity. These locales are not readily available to them in safe and well-maintained areas of their neighborhoods. Poorer areas may not give children the access to places which encourage and promote physical activity. Because of this, these kids are unable to make daily exercise routines a fun and natural part of their after-school experiences. Although the above issues are important to maintaining a healthy lifestyle for children in particular, there are much more serious factors that come into play. These biological problems create an immediate stumbling block for parents and children when confronting weight problems.

Metabolic factors play a crucial role in the health and welfare of minority children. Many children in certain ethnic groups have a greater predisposition to medical conditions such as high blood pressure and diabetes. Of course, no matter what a parent or child does to combat these physiological problems; they play a significant role in the success or failure of the family's struggle with overweight/obese children. First, poor children do not always receive the necessary medical checkups, which should be routine for all children. Because of this, a poor child with a weight problem is already more likely to have established bad eating habits. Without guidance from a professional as soon as the problems are noticed, poor children are already behind as they struggle to change these bad habits. Unfortunately, these conditions can affect African-American kids more seriously as they do not receive the proper attention from the medical profession.(Lutfiyya et al. 2008, 191-199)

3.3 Government programs to prevent childhood obesity

A number of government programs have recently been created to address problems in a local setting so that poor families can easily access treatment. Although, the struggle to prevent childhood obesity rages, there are a number of programs parents can utilize to help them make changes in the lives of the entire family. These changes can save the lives and the futures of their overweight and obese children. The “WE CAN” initiative is a new public education outreach program designed to help children 8-13 years old maintain a healthy weight. WE CAN, Ways to Enhance Children's Activity and Nutrition, tries to increase physical activity, help children make healthy food choices, and reduce screen time. This program is funded by the National Institutes of Health and helps children in their own homes and community’s settings make changes to their lives. Through the WE CAN program, the National Institutes of Health recommends the following to begin making a lifestyle change towards better health: “Emphasizing fruits, vegetables, and low-fat and fat-free milk products, including lean meat, fish, poultry, beef, nuts, and eggs, cutting back on foods and drinks which are high in fat and sugar” (NIH publication no. 05-5273.) There are no fees for fat-camps and the children learn how to use daily, household items to increase their physical activities when parks, playgrounds, and gyms are unavailable. (We Can!®, NHLBI, NIH. NIH, n.d. Web. 12 Mar. 2012)

There is much work to be done to improve the health and welfare of who are obese or at-risk of becoming so. Doctors and psychologists continue to do research and conduct studies to help those children who struggle with weight problems and the self-esteem and body image issues that children often experience as a result of this struggle. With the active involvement of parents, the medical community, and the general community, children stand a much better chance of making positive changes to their lifestyles.

4 BETTER SCHOOL MEALS

To gather information about European school meals I read several different articles to gain insight on the subject. For the American perspective of school meals I conducted a focus group targeting children ages 10-12 years of age; for most Americans this is about the age they enter middle school and are able to select their own meal from a variety of options. I was given permission from the school administration to solicit volunteers for the focus group and all who wished to participate met with me after school of our set date for our discussion.

4.1 School Meals in Europe

According to the article School meals in Finland Investment in learning Finnish school published by the Finnish National Board of Education legislation guarantees a well-balanced meal for each student every school day. With The plate model and a sample meal the objective being to maintain and improve the students overall health and well-being while also supplying students with the energy necessary to successfully complete for their school work. School cafeterias meet these goals by following the dietary guidelines for schools issued by the National Nutrition Council. According to the council school lunch should equate to about one third of a child's daily food intake and should be well-balanced, tasty, as well as colorful.

According to the school menu the components of a well-balanced include: fresh and cooked vegetables covering half of the plate, potatoes, rice, or pasta covering one quarter of the plate, fish at least once week but preferably twice. Meat or (beans and sprouts are offered as part of an established vegetarian diet) covering the remaining quarter of the plate. Skim or semi-skim milk, fermented milk, or water to drink; also included is bread with vegetable margarine or butter-margarine blend, berries or fruits for dessert.

Italy has made a sustainable food a priority; the majority of Italian schools serve lunches made from organic ingredients, mostly locally grown. The daily meal at “la mensa della scuola” (the school cafeteria) is customarily centered around pasta or risotto in addition to a salad that is served as a separate course. Meat is served twice a week at most and in small portions. But it's not all about nutritionally correct eating for Italian children merendine, aka snacks, are big parts of most children's days. Bread spread with chocolaty Nutella is a classic between-meals snack. Italy's kids are almost as addicted to packaged candies and cakes as their American counterparts. Italy actually has a higher proportion of overweight children than the U.S. (Panunzio et al. 2007, 525)

Although serving a sloppy Joe to American students wouldn’t be considered abnormal. The same would not be considered for French school children. In France school lunches are taken very seriously, just as seriously as meals for adults. In fact, children meals are very much the same as the adult meals minus the wine. Weekly menu options in a French cafeteria could very well include such dishes as veal scallops Marengo, hake with lemon sauce, and lamb with paprika. Fresh bread and salad are, of course, included at every meal and fruit and yogurt are the usual desserts. (Ward, 2010)

4.2 Mealtime Focus Group

To gain some new perspective a focus group was conducted; on the table was a half-liter of coca cola, orange juice, chips, and large bowl of whole apples. It began by asking the group what their favorite foods were immediately one child said pizza! What kind of pizza? Pepperoni it was asked if he liked other kinds of pizza to the reply of “yes, but not the yucky kind with vegetables.” The conversation continued as the children talked about what meals they preferred at school, things such as tater tots, nachos, and hamburgers were the most popular choices. But when asked about the salad selections the group grew quite, “I looked at the salad line before but it doesn’t look so good the lettuce looked old like it had been there for days, but I have tried it before”. The student

went on to explain ”you don’t get full eating salad and then you have to have extra money to get something out of the vending machine to keep your stomach from growling until the end of the school day.”

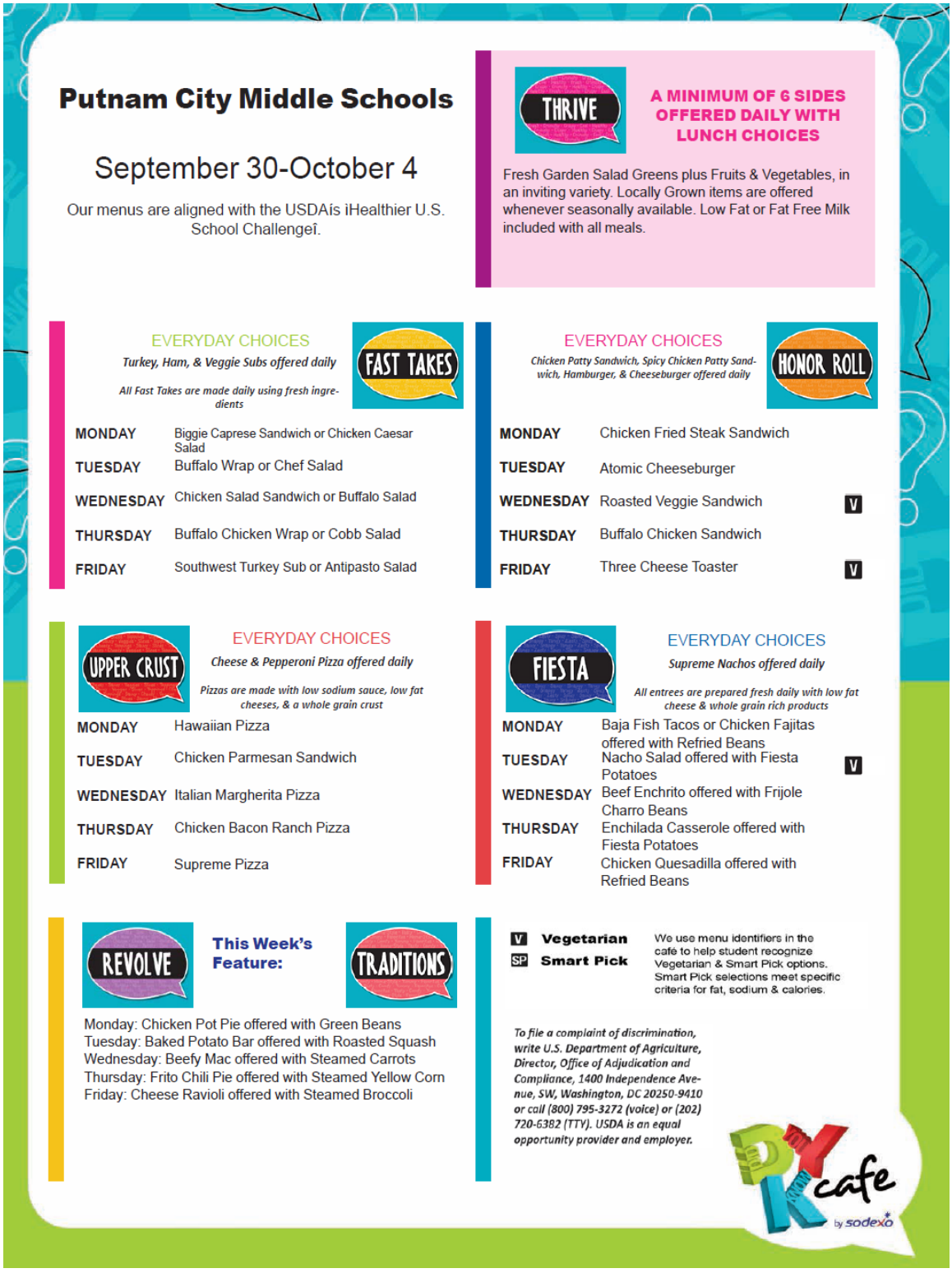
The conversation they moved to the things they ate at home. 75% of them where latchkey kids and where responsible for making their own afternoon snacks, they also revealed that most days they ate fast food and only had a home cooked meals on days when there mom didn’t have to work or on the weekend. We asked if they accompanied their parent(s) to the grocery store and made selections of their own and all of them explained that it was a must. “One time I didn’t go to the store with my mom but I asked her to get some cereal for me, she came back with some stuff that had less sugar I still ate it but I had to add my own sugar to it so from then on I’d make sure to go with her so she doesn’t try to sneak “healthy” stuff on me.” At the end of the discussion I asked them if they like a snack or something to drink from the table they took up their cups most anxiously and reached for the coke and chips reminding the others not to take it all before they obtained their fair portion. When they all left every apple was accounted for and the orange juice was left unopened. Though all of these children were age 12 and under they had very particular taste and opinions about what food was good and which were not. They all exemplified knowledge of knowing what foods were considered healthy and which ones were not; but although they knew the difference that had no bearing on their selections it was exclusively “tasty” choices over healthy choices.

Unfortunately these choices and actions seem to be typical of American children when looking at the school lunch room configuration and choices it is apparent what is popular.

The school cafeteria that was observed served children ages 10-13. The daily menu is divided into 5 sections that cater to popular taste. The first section is Fast Takes which offers turkey, ham, & veggie sub sandwiches/wraps and salads everyday and a daily special in addition to those offerings. The second section is Upper crust this section offers cheese and pepperoni pizza everyday and a different specialty pizza is offered daily. The third section is Honor Roll

this section offers chicken patty sandwiches, spicy chicken patty sandwiches, hamburgers and cheeseburgers with a daily hot sandwich special. The fourth section is Fiesta which offers supreme nachos daily and Mexican inspired selection such as Baja fish tacos or chicken fajitas, Nacho salad, beef enchiladas or chicken quesadillas. The fifth section is Revolve serving a different traditional style meal everyday such as chicken potpie with green beans, baked potato bar with squash, beefy macaroni with steamed carrots, Frito chili pie with steamed yellow corn, and cheese ravioli with steamed broccoli.

The most popular lunch option is the Fiesta Section most notably the nachos. Followed by the Honor Roll, Upper Crust, Revolve and lastly the Fast Takes. Nachos and fiesta potatoes or cheeseburgers and French fries versus a Chef salad or a baked potato with fixings and roasted squash.



Picture 2. The daily menu.

4.3 Observations and analysis

4.3.1 Non-core Food and Beverage Marketing to children

Evidence shows that excess weight in children has become a significant global health issue. The article cites that 10% of school aged children and 22 million younger children than 5 years are estimated to be overweight or obese. While no one is disputing that obesity levels are increasing across the globe. Food marketing to children has begun to be recognized as one factor contributing to the obesity. This is attributed to the fact that children have begun to play a significant part in household purchasing decisions. Reviews from the 2006 World Health Organization have found that marketing generates positive beliefs about advertised foods and influences. Beginning in January 2008 EU legislation prohibited advertisements for products in or around programs specifically made for or of particular appeal to children younger than 16 years of age (Kelly et al. 2010.)

Scientific evidence correlates the relationship between unhealthy food marketing and children's food choices as well as purchases and consumption. While this is not the only factor in the obesity equation statutory regulations to prohibit mass advertising of unhealthy foods could prove to be a useful first step in prevention. Television is one of the most frequently used means of entertainment for children ages 2 to 13 years adverts displayed are major influencers. 5500 television adverts are viewed by children ages 2 to 11 year old annually in the United States. Evidence has shown that increased exposure to unhealthy food adverts on television leads to unhealthy food choices. Children that are overweight and or obese display a higher capacity to remember such adverts while children of healthy weight do not. (Gwozdz & Reisch, 2011) Currently, Australia doesn't permit adverts to on television during programs targeted to pre-school aged children. Other countries have taken the restriction of adverts a step further; in Denmark, Norway, Sweden, and Finland commercial sponsorship of any kind is not permitted during programs for children. Additionally Sweden and Norway adverts directly targeting children

under the age of 12 are not permitted as well as not allowing adverts during programming for children.

The European Union implemented The EU Audio visual Media Services Directive which sets down minimum provisions on advertising to children for its 27 members. The directive states: “that advertising shall not cause moral or physical detriment to minors, and shall therefore comply with the following criteria for their protection. It shall not directly exhort minors to buy a product or a service by exploiting their inexperience or credulity. It shall not directly encourage minors to persuade their parents or others to purchase the goods or services being advertised. It shall not exploit the special trust minors place in parents, teachers or other persons. It shall not unreasonably show minors in dangerous situations. Children’s programs may only be interrupted if the scheduled duration is longer than 30 minutes. Product placement is not allowed in children’s programs. The Member States and the Commission should encourage audio visual media service providers to develop codes of conduct regarding the advertising of certain foods in children’s programs. (Europa 2010)

According to the Federal Trade Commission Food and beverage companies spend more than $1.5 billion per year to promote their products to American children and adolescents. (Mello 2010) In 2006 the American Academy of Pediatrics highlighted numerous studies connecting children television advert exposure to requests for junk food and to caloric intake concluding that children were psychologically defenseless against advertising because of their limited cognitive development (American Academy of Pediatrics, Committee on Communications 2006: 2563). In the 1970’s the United States Federal Trade Commission studied the issue of advertising to children but decided against regulation.

4.3.2 Reflection

Childhood obesity not only has enormous physical consequences but emotional repercussions which can affect the child's academic and social development. Studying the causes and effects of childhood obesity is a growing field amongst medical professionals and child psychologists. Over the past 30 years, these professionals have redefined the technical definition of obesity which has led to the classification of obesity as a medical condition.

Obesity is rising in Western countries in epidemic levels and at least one out of every four people is obese. Davis reports that there are more than nine million obese children in the United States 6 years and older. Obesity levels are calculated using the BMI, or Body Mass Index, which calculates weight in kilograms divided by the square of height in meters. According to the study, one practitioner reported treating a 4 year old child who weighed 200 lbs. Although this is an extreme case, many health care workers have reported treating overweight and obese children regularly who suffer from hyperlipidemia, hypertension, and diabetes.

This research also reveals that the rise in obesity among minority groups such as African-Americans and Hispanics is greater than that of white children living in the United States. Overweight and obesity are used almost interchangeably in the professional literature. Now that the epidemic levels have clearly presented themselves it is now important to ascertain the factors that help created or cultivated if you will the current situation.

The effect of obesity amongst children and adults has risen greatly in the last 50 years. Doctors, psychologists, and other scientists have been studying the growing problem for years. According to Sheila Davis, co-author of the article "A Focus Group Study of African American Obese Children in the United States," obesity is rising in Western countries in epidemic levels and at least one out of every four people is obese. Davis reports that there are more than nine million obese children in the United States 6 years and older. Obesity levels are calculated using the BMI, or Body Mass Index, which calculates weight in

kilograms divided by the square of height in meters. According to the study, one practitioner reported treating a 4 year old child who weighed 200 lbs. Although this is an extreme case, many health care workers have reported treating overweight and obese children regularly who suffer from hyperlipidemia, hypertension, and diabetes.

5 CONCLUSIONS

Because American schools are most often underfunded, school districts enter into contracts with soda and snack companies allowing machines that sell junk food to kids in return for a cut of the profits. Food ads frequently target kids directly, with foods like chips, sugary cereals, Kool-Aid, Jell-O, macaroni and cheese, etc.

Offering results and a viewpoint that seems to give a direct correlation to the time spent watching TV or playing computer games and obesity in children and adolescents. As levels of obesity among children and young people have continued to increase this has stirred conversation as to whether some type of regulative control should be set on food marketer who target children.

Children don't have either the knowledge or the self-discipline it takes to choose a healthy diet. The habits and tastes you set up when you are young and learning what 'food' is and what tastes good stays with you for a lifetime, so several generations of us were taught, by our schools and parents to eat badly With the popularity of video games and television channels made just for kids they don't get outside to play as they did in previous generations.

The habits and tastes one is set up with when they are young and learning what is 'food' and what tastes good stay with them for a lifetime, so several generations of Americans were taught, by our schools, to eat badly.

Americans feel cheated if they pay a lot for a tiny dish of food and most often will not return again. So most restaurant fill up their plates so it feels like people are getting their money's worth.

To cook a homemade chicken dinner, you need to have a car (you can't buy fresh chicken at the corner store), money for gas, time to shop, enough money in hand for a cartload of food, and time to cook which working parents are less likely to have. Parents having to work longer hours to support the family play a big role in not only how the evening meal is prepared but the amount of

exercise children obtain. Often time having to stay in until a parent arrives home in order to supervise them.

One of the most apparent things in analyzing the data from the implementation plans of school lunches is the setup of the whole system. In Finland children have access to three meals The Finnish educational system is often considered one of the best in the world and serving healthy school lunches is a major priority. Government regulations demand that meals are "tasty, colorful and well-balanced." Since the late 1990s, guidelines have specified serving proportions: vegetables, cooked and raw, must cover half the plate (carrot and beet salads are popular), with proteins and starches taking up one-quarter plate each.

In comparison to the United State who most time only offer a vegetarian selection in the form of a salad if at all. The majority of the Finnish's schools offer a hot vegetarian option every day. The national specialty hernekeitto, a green pea soup often flavored with smoked pork, is usually served on Thursdays in a nod to Finnish tradition .

For Americans all of the blame cannot be placed on the variety of offerings though. In cases where there are a variety of healthy selections given students still opt for the less healthy choice. In my opinion the reason the obesity levels are epidemic in the USA and not Europe boils down to these key things.

1. Lack of nutritional education at an early age.
2. The need for a two income household one parent is not afforded the option of stay home to make sure that proper meals and education that is given at home is provided like in previous generations.
3. The ability of big business to continuously advertise junk food to children.
4. The governments role in funding programs that were initially meant to stabilize crop prices, keep farmers farming, and provide U.S. families with a reliable and affordable supply of food; that now encourage production of unhealthy foods.

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