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Food Taxes: A Palatable Solution to the Obesity Epidemic?

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Comments

Food Taxes: A Palatable Solution to the Obesity Epidemic?

Adriana Badilas*

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I. INTRODUCTION

“Good health is seldom acquired by heredity or by just good fortune. It is more often a direct reflection of the way we live and the way we think.” Obesity related illnesses have taken more lives than the attacks on 9/11, smoking, and the AIDS epidemic. Coronary heart disease and diabetes are the number one causes of death in the United States and a leading cause of death globally. Although obesity has been regarded as uniquely American, this distinction is becoming less pronounced as the rates of obesity are increasing throughout the world.

Projections by the World Health Organization (WHO) suggest that by the year 2025 levels of childhood and adult obesity may reach as high as 50% in the United States (U.S.), 40% in Australia, and over 20% in Brazil. These global trends are puzzling to say the least; being overweight was once revered as a sign of wealth, but this is no longer the case. In fact, neighborhoods with low economic and social resources now have some of the highest rates of obesity.

1. THE SURSIKS, Good Health, on CHRISTMAS IN MARCH (Crabid Music 2008).
3. Heart Disease Is the Number One Cause of Death, CTR. FOR DISEASE CONTROL (Jan. 26, 2010), http://www.cdc.gov/features/heartmonth/ [hereinafter CTR. FOR DISEASE CONTROL]; Erika Gebel, Heart Disease a Leading Cause of Death Worldwide, AMERICA.GOV (July 24, 2008), http://www.amERICA.gove/SL develop-english/2008/July/20080724175631abretnuh0.9819757.html; Paresh Dandona et. al., Inflammation: The Link Between Insulin Resistance, Obesity and Diabetes, 25 TRENDS IN IMMUNOLOGY 4, 4-7 (2004) (stating that several studies have indicated that the presence of inflammatory predicates, such as obesity, predicts the development of type 2 diabetes).
5. Id.
The costs associated with this epidemic are equally staggering. As First Lady Michelle Obama mentioned, "experts tell us that we are spending outrageous amounts of money treating obesity-related conditions like diabetes, heart disease, and cancer." Just how astounding are these costs? According to the Centers for Disease Control and Prevention (CDC) the estimate is $147 billion a year. This total estimate is more than the amount the U.S. spent in Iraq in 2009. In other words, fighting obesity is costing Americans $52.2 billion more per year than fighting terrorism in Iraq.

The obesity epidemic is rooted in a variety of societal and cultural factors. Experts therefore disagree on the best approach for addressing this problem. Some experts have suggested taxing unhealthy foods at higher rates in order to deter consumers from making unhealthy choices. This was a concept that was put forward in 1994 by Kelly Brownell, an economist and professor of psychology at Yale University. Brownell's food tax was first met with aversion, but grew in popularity as obesity rates continued to increase. Food taxes gained additional popularity when, in 2003, the WHO encouraged the use of higher taxes on unhealthy foods as a useful measure for treating obesity.

This Comment asserts that implementing a tax on unhealthy foods will decrease the healthcare costs associated with treating obesity-related disorders. Food taxes will encourage this shift by acting as a deterrent and by raising revenue, which can then be used to fund diversified farming and wellness programs through the use of subsidies. Part II provides background on obesity trends throughout the world and the direct and indirect costs associated with this epidemic. Part III of this Comment provides a brief history of food taxes and the impact income can have on weight. A comparison between the point-of-sale tax and the value added tax (VAT) is made in Part IV, and Part V argues that food taxes would be more effective if implemented as a VAT. Part VI then describes the correlation between price and consumption. Lastly, Parts VII and VIII

9. Id. (as noted by a study conducted in 2009).
11. See id. (the figure $52.2 billion was computed by taking the average monthly spending on the Iraq War ($7.3 billion) and multiplying it by twelve months. That amount was then subtracted from $149 billion).
13. Id.
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explain how a VAT can help fund healthcare reform and promote national security.

II. A WORLD IN CRISIS

A. Increase in Obesity: Causes

The world's continuing population growth is creating a heavy burden on food suppliers. From 1950 to 2010 the number of people throughout the world more than doubled, from approximately 2.5 billion to 6.8 billion. If trends continue as they are, the United Nations (UN) projects that the population will reach 9.1 billion by the year 2050, and as the population increases so will the demand for food. Historically, the added demand was met by improving the efficiency of food production. Food production was made more efficient through the use of genetically engineering seeds, enhanced fertilizers, and disease-resistant crops.

1. Corn Subsidies

The government can promote and control the types and amounts of crops produced through the use of subsidies. For example, agricultural subsidies are the bedrock of the European Union (EU) totaling about $79 billion, or approximately half of the group's budget. Although the allocation of farm subsidies in the U.S. is less than in the E.U., the American government subsidizes farmers both when they over-produce and when the price of the crop falls too low. This gives farmers an incentive to grow as many crops as possible. Nowhere is this more apparent than in the corn industry, where the use of steroids and chemicals has helped farmers more than triple the number of corn bushels produced during the last 40 years. Additionally, the use of preservatives

19. See Sadik, supra note 16.
20. Id.
21. See id.
25. Thompson, supra note 22.
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has helped to increase the lifespan of perishable foods by controlling the spread of bacteria, making chemical additives a regular part of our diet.

Corn subsidies make it possible for farmers to produce mass quantities of food, food that is then sold to restaurants at low prices. The inevitable result is larger portion sizes, which have distorted our understanding of what a normalized meal should look like. Furthermore, it is estimated that more than 42% of food spending in the U.S. occurs in restaurants. In fact, most portion sizes served at restaurants are significantly larger than the sizes recommended by the Food and Drug Administration. One cup of pasta used to be the typical serving size for an entrée; however, the typical serving of pasta is now three cups. This effect is known as “portion distortion,” and is linked to many expanding waistlines.

2. Cultural and Environmental Changes

Cultural changes have also contributed to the self-destructive relationship Westerners have with food. In most of the U.S. it has become impossible to support a middle-class family on one income; since the 1970s the average father’s income has increased by less than 1%, while the amount of the family budget applied towards the mortgage has gone up by 69%. Therefore, the mother’s choice of whether to work or not is no longer a choice at all. This type of “on the run” lifestyle leaves little time to plan healthy meals, and is consequently becoming a major reason why people are eating less healthy.

28. Thompson, supra note 22.
32. See Hellmich, supra note 29.
33. Id.
36. Id.
37. Kim Berndtson, It Is Possible to Eat Healthy While on the Go, EMS RESPONDER NEWS (June 25,
Environmental factors, such as the accessibility and availability of cheap foods, make it impossible for many people to maintain a healthy weight. The bottom line is that calories count. Although a variety of factors can influence our relationship with food, weight gain and weight loss can be explained by an imbalance between calories consumed versus calories burned. Genetic factors may play a role in an individual’s susceptibility to weight gain, but these factors alone cannot explain the rapid increase in global obesity trends. This is because genetic changes are very gradual and cannot account for the rapid increase in obesity statistics. The epidemic must therefore be attributed to something other than genetic markers. The more likely culprits are the abundance of food and a decrease in physical activity.

Fast food restaurants market heavily to children and young adults, who make up a large part of the consumer base. Therefore, the ease and accessibility of these restaurants for children and young adults is a priority for the industry. A study conducted in Chicago in 2002 indicates that fast food restaurants are statistically clustered within short walking distances from schools. This clustering is exposing children to foods that are poor in quality and nutrition, which consequently affects the child’s overall health and well-being.

B. Measuring Up?

There is no simple and entirely accurate method for measuring body fat content. Generally, fat content is calculated using the Body Mass Index (BMI), a screening test that has been vehemently criticized for its disadvantages. But despite its flaws, the BMI continues to play a prominent role in measuring body fat percentage. The BMI’s simple weight to height ratio makes it convenient
and cheap to administer on a wide scale.\textsuperscript{49} Secondly, the BMI has been shown to accurately calculate the body-fat index in most persons.\textsuperscript{50} However, even though the BMI is accurate for most men and women, the scoring system has some limitations: it may overestimate the body fat in athletes, who have more muscle mass, and underestimate body fat in older persons, who have lost muscle mass.\textsuperscript{51}

The BMI works by ascribing a number to each tested individual; a BMI of 25 to 29.9 is considered overweight while a BMI of 30 and above is considered obese.\textsuperscript{52} The BMI number can then be used to estimate a person’s risk of developing certain weight-related illnesses. Middle-aged women with a BMI between 23 and 25 have a 50\% greater risk of developing coronary heart disease.\textsuperscript{53} Similarly, a BMI of 25 to 29 in men was linked to a 72\% increase in risk.\textsuperscript{54}

\textbf{C. An Economic Perspective}

Currently there are more than one billion adults worldwide who suffer with overweight or obesity.\textsuperscript{55} Of these individuals, over three hundred million are clinically obese while twenty-two million children are said to be overweight.\textsuperscript{56} Being overweight or obese can lead to undesirable and costly health consequences including hypertension, high cholesterol, and diabetes.\textsuperscript{57}

The 2002 Lipgene Project estimated that the direct and indirect costs of overweight and obesity related conditions among the fifteen member states of the European Union was 32.8 billion Euros.\textsuperscript{58} Direct costs include primary medical consultations and hospital treatment.\textsuperscript{59} Indirect costs are derived from the number of days taken off work due to sickness and the number of early deaths resulting from obesity or overweight.\textsuperscript{60} As the second least overweight country in the EU, France’s direct and indirect costs were 4.3 billion Euros.\textsuperscript{61} Costs in the United

\begin{itemize}
  \item \textsuperscript{49} See id.
  \item \textsuperscript{50} Id.
  \item \textsuperscript{51} Obesity Myths, supra note 47.
  \item \textsuperscript{52} Id.
  \item \textsuperscript{53} Robert H. Eckel, \textit{Obesity and Heart Disease}, 96 AM. HEART ASS’N 3248, 3248 (1997).
  \item \textsuperscript{54} Id.
  \item \textsuperscript{55} Obesity and Overweight, WORLD HEALTH ORG., \url{http://www.who.int/mediacentre/factsheets/fs311/en/index.html} (last visited Mar. 4, 2011).
  \item \textsuperscript{56} Id.
  \item \textsuperscript{57} Id.
  \item \textsuperscript{58} James Fry \& Willa Finley, \textit{The Prevalence and Costs of Obesity in the EU}, 64 PROC. OF THE NUTRITION SOC’Y 359, 359 (2005), \url{available at http://journals.cambridge.org/action/displayFulltext?type=1&fid=814200&jid=PNS&volumeId=64&issueId=03&aid=814188}.
  \item \textsuperscript{59} Id.
  \item \textsuperscript{60} Id. at 359-60.
  \item \textsuperscript{61} Id. at 360.
\end{itemize}
Kingdom were estimated at 5.4 billion Euros. During the same year in the U.S. the direct and indirect costs were estimated at $92.6 billion. Medicaid and Medicare paid approximately half of these expenses.

The personal costs associated with being overweight or obese are equally devastating. Affected individuals are often socially stigmatized, resulting in higher rates of anxiety, social isolation, depression and poorer psychological adjustment. The consequences of stigmatization can negatively impact employment, social functions, school attendance, and personal relationships. Obese and overweight people tend to earn less than individuals who have a normal BMI range. Stereotypes such as sloppiness, lack of competence, laziness, being a poor role model, and lack of self discipline are often attributed to overweight or obese individuals. These biases result in job discrimination, higher healthcare costs, and compromised physical function.

III. FOOD TAX: HISTORY AND APPLICATION

A. History

Food taxes were pioneered by Kelly Brownell after he noticed a price disproportion between the cost of healthy foods and unhealthy foods. Brownell pointed out that foods high in fat and low in nutritional value are some of the lowest costing on the market. As a solution to this imbalance in price, Brownell proposed that revenue from junk-food taxes be used to fund nation-wide nutrition programs. This type of food tax elicited a firestorm of controversy: opponents claimed that it interferes with individual rights, and forces the government to play the role of nanny. Despite its initial criticism, food taxes once again became the subject of much discourse as the rates of overweight and obesity

62. Id.
64. Id.
65. Obesity, Bias, and Stigmatization, THE OBESITY SOC’Y, http://www.obesity.org/resources-for/obesity-bias-and-stigmatization.htm?qh=YTo0O0ntpOjA7czo2OIJ3ZWVnaHQtO2k6MTBzcjc6Iid3ZWVnaHQ02k6MjtzOjQ6InJpYXM,jO2k6MzzxOjExOIJ3ZWVnaHQtYmlhcyl7fQ%3D%3D (last visited Mar. 4, 2011) (describing how stigmas carry through to various aspects of life).
66. Id.
67. Id.
68. Id.
70. See Brownell, supra note 12; Ball, supra note 14.
71. See Brownell, supra note 12; see Ball, supra note 14.
72. See Brownell, supra note 12; see Ball, supra note 14.
started to climb.\textsuperscript{74} Most prominently, in 2003, the World Health Organization proposed that countries should tax foods in an effort to encourage people to make healthier choices.\textsuperscript{75}

B. How Food Taxes Can Help

"We live in a toxic food environment where high-calorie and high-fat foods are available at low cost."\textsuperscript{76} Food taxes can improve the toxicity of our food environment by helping consumers make healthier choices. More specifically, revenue earned from raising the price of unhealthy foods can be used to subsidize the sale of healthy foods. Reducing the price of healthy foods promotes the purchase of that food by lowering its price relative to the alternative food choices.\textsuperscript{77} Although consumers are influenced by a variety of environmental factors when deciding what to buy, price plays a telling and powerful role.\textsuperscript{78} Most people have a general understanding of which foods are healthy and which are not.\textsuperscript{79} This knowledge, when taken in tandem with price, can influence the consumer to make healthier food choices.\textsuperscript{80}

C. Determining What Foods to Tax

Factors that affect food consumption are highly interdependent.\textsuperscript{81} To successfully implement a food tax, it is necessary to determine what foods should be subject to taxation and what unintended effects the tax will have on the consumption of replacement foods.\textsuperscript{82} Careless taxation can have a perverse effect on the purchase of foods that compliment or substitute each other.\textsuperscript{83} Complimentary foods, such as bread and butter, have negative cross elasticity, meaning that as the price of bread increases consumption of butter decreases, and vice versa.\textsuperscript{84} Foods that could be substituted for each other have a positive elasticity, meaning that the increase in price of one item will increase the

\textsuperscript{74} See id. at 1178-79.
\textsuperscript{75} Srikameswaran, \textit{supra} note 15.
\textsuperscript{76} Ball, \textit{supra} note 14.
\textsuperscript{78} See id. at 841S.
\textsuperscript{79} Id. at 842S.
\textsuperscript{80} Id.
\textsuperscript{81} Oliver Mytton et al., \textit{Could Targeted Food Taxes Improve Health?}, 61 J. EPIDEMIOl.CMTY. HEALTH 689, 689-91 (2007), available at http://jech.bmj.com/content/61/8/689.abstract (discussing the cross-elasticity of food); See French, \textit{supra} note 77, at 841S (discussing how price influences consumption).
\textsuperscript{82} See Mytton et al., \textit{supra} note 81, at 689.
\textsuperscript{83} Id. (discussing the effects of negative and positive cross-elasticity).
\textsuperscript{84} Id.
For instance, taxing foods based on saturated fat content has the undesired effect of increasing the consumption of sodium, which is linked to a heightened risk of death from cardiovascular disease.  

C. The Three Approaches

This Comment examines three methods of taxing unhealthy foods and the effects each method has on nutrition and health. The first approach is a tax based on the food’s saturated fat content. Empirical data predicts that this method is unsuccessful at reducing the incidents of deaths attributed to poor diet because of cross-price elasticity; increased prices on foods high in saturated fat caused a rise in sodium intake. Although most people do not perceive sodium to be as dangerous as saturated fat, studies have shown that if Americans reduce their sodium intake by one gram per day it would result in 250,000 fewer new cases of heart disease and prevent a total of 200,000 deaths every ten years. To successfully reduce the incidents of obesity, an unhealthy food tax must offset the undesired consequences of price-elasticity.

The second method of taxation, known as model SSCg3d, was drafted by British researchers. The SSCg3d is a scoring system where points are assigned to all foods based on the content of eight nutrients. The scores range from -12 to +29. Scores ranging from of -12 to 2 are considered healthy, intermediate foods fall between 3 and 8, while a score higher than 9 is regarded as unhealthy. For example, spinach is rated -12, while chocolate cookies are rated +29. Cookies are rated higher because they contain a variety of ingredients that are unhealthy, such as: enriched flower, hydrogenated oils, and refined sugars. An added benefit of the SSCg3d formula is that it addresses price elasticity. Because the

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85. Id.
86. See id. at 691.
87. Id. at 689.
88. Id.
89. Id. at 691.
91. Mytton et al., supra note 81, at 693.
92. Model SSCg3d, FOOD STANDARDS AGENCY, http://www.food.gov.uk/multimedia/pdfs/nutrient model.pdf (last visited Mar. 4, 2011) (There are three steps to working out the overall score: (1) add the total points for calories, saturated fat, sugar and sodium; (2) add the total points for iron, calcium, n-3 PUFAs, and fruit and vegetables percentage; (3) subtract the points in step two from the points in step one. This final number provides the overall score of the food.).
93. Id.; Mytton et al., supra note 81, at 690.
95. Id.
96. See generally Mytton et al., supra note 81, at 691. The SSCg3d model implies that foods with high levels of saturated fat, salt and extrinsic sugar receive higher ratings. Id.
SSCg3d formula scores all foods, substitute foods—which are nutritionally similar to the foods they replace—are also scored. Consequently, consumers who do not want to pay more for their favorite unhealthy food cannot turn to substitute foods because, under the SSCg3d model, the substitute foods are also taxed at the higher rate.

The use of the SSCg3d model to rank foods and assign taxes based on how the food ranks was shown to have positive consequences on the rates of cardiovascular disease. Studies conducted in Britain reveal that the SSCg3d model can prevent over 3,200 cardiovascular related deaths per year. Because the leading cause of death in both the U.S. and in Britain is heart disease, applying a similar VAT in the U.S. may have a comparable reduction in mortality.

A third method for taxing foods is applying a point-of-sale tax on all junk foods. This method is one often used in the U.S. State sale taxes on soft drinks and snack items are used in 40 states. This type of tax is least successful at improving nutrition and health because it is primarily used as a means of increasing government income rather than to deter consumption. Moreover, the tax applies to only some foods, and it fails to account for cross elasticity. Consequently consumers can substitute the taxed junked food with an unhealthy complimentary food. The point-of-sale tax may have better results if policymakers focused more on dedicating the revenue from the sale tax to support

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97. See generally id. The SSCg3d model implicitly ascribes a health rating to all foods; cross-elasticity is avoided because one unhealthy food will not be substituted for another. Id.


100. See generally Batty, supra note 98 (implying that because a VAT on unhealthy foods in Britain can avert thousands of deaths from heart attacks and stroke, the same could be true in the U.S.); Compare About Heart Attacks, BRITISH HEART FOUND., http://www.2minutes.org.uk/aboutAttacks.htm (last visited Mar. 4, 2011) (referencing a 2006 statistic reporting that 94,381 people in the UK died of heart disease), with America’s Heart Disease Burden, CTR. FOR DISEASE CONTROL, http://www.cdc.gov/heartdisease/facts.htm (Dec. 21, 2010) (citing a 2006 statistic reporting that 631,636 people died of heart disease in the U.S.). The inference is that if a VAT can save 3,200 lives in Britain, it will save more than 3,200 lives in America.


102. Id. The third system of taxation used in this Comment is different than the third method of taxation as advanced by Batty and Mytton in their respective articles.

103. Id. at 231.

104. Id. at 242.

105. See Michael F. Jacobson & Kelly D. Brownell, Small Taxes on Soft Drinks and Snack Foods to Promote Health, 90 AM. J. PUB. HEALTH 854, 854 (June 2000) (discussing how taxes are levied on categories of foods). Taxing only some categories of foods (such as soda and confectionary items) will not account for cross-elasticity because consumers can replace one unhealthy product with another.
differential changes among people, while providing more funding for obesity prevention programs.\footnote{Chriqui, supra note 101, at 245.}

Scientists have differing opinions regarding what method is best for lowering the incidents of obesity. However, researchers found that the first model—taxing foods with high levels of saturated fats and nothing else—is ineffective because people would switch to buying other unhealthy foods.\footnote{Batty, supra note 98.} The second model,\footnote{Batty and Mytton's second and third models of taxation are not the same as the second and third models of taxation analyzed in this Comment. Rather, this Comment combines Batty and Mytton's second and third models into one model, the second model of taxation. See Batty, supra note 98.} which taxes a wider range of foods based on the SSCg3d score, is the most promising method because it accounts for cross-elasticity.\footnote{Chriqui, supra note 101, at 245; Jacobson & Brownell, supra note 105, at 854.} The third method, increasing the point-of-sale tax on some junk foods, is least successful because it fails to account for alternatives to the unhealthy foods, and because revenue from these taxes is seldom used to fund obesity prevention programs.\footnote{The State of the American Diet, Food, Nutrition & Sci. (Oct. 25, 2010), http://www.foodnutritionscience.com/index.cfm/do/monstanto.article/articleld/468.cfm.}

1. **Why Subsidize Fruits and Vegetables?**

Americans are notorious under-consumers of fruits and vegetables,\footnote{See id.} which contain essential vitamins and minerals that protect against certain chronic and cardiovascular disorders.\footnote{Sue Hughes, High Intake of Fruit and Vegetables Again Linked to Reduced Heart Disease Risk, THEHEART.ORG (Jan. 21, 2011), http://www.theheart.org/article/1175549.do.} There are many health benefits associated with the consumption of a variety of fruits and vegetables, and with avoiding saturated fats, refined sugars, and sodium.\footnote{Victor Machione, Eating More Fruits and Vegetables Could Protect You from Heart Disease, ARTICLES BASE (Feb. 1, 2011), http://www.articlesbase.com/diseases-and-conditions-articles/eating-more-fruits-and-vegetables-could-protect-you-from-heart-disease-4147347.html.} Research shows that men and women who ate at least eight servings of fruits and vegetables per day, when compared to men and women who ate less than three servings per day, decreased their chance of dying from a heart attack by 22%.\footnote{Id.} The study identified one serving as being approximately 80g,\footnote{Id.} the equivalent of a medium apple or a small banana.\footnote{Id.} Although other factors may have contributed to these results, the message to glean from this study is that people who regularly eat fruits and vegetables have added protection from dying of cardiovascular disease.\footnote{Id.}
But if the benefits of eating a healthy diet are readily apparent, why do people continue to eat food that is bad for their health? Although lack of knowledge about nutrition is a contributing factor, it is not likely to be the main culprit because people have a general understanding that fruits and vegetables are good for their health. Another reason for this discrepancy may be affordability. Diets that are high in sugar and saturated fat are more affordable than diets that are rich in fruits and vegetables. This price distortion is driven by government policy-makers, who create incentives for the production of unhealthy foods through the use of farm subsidies. This type of government subsidizing encourages widespread production of corn, and corn derivatives such as high fructose corn syrup.

Government corn subsidies are making us sick. There is a strong correlation between the rise in the percentage of Americans who are obese and the rise in the use of corn syrup. In fact, the increase in obesity and the amount of corn syrup consumed rise at almost the same rate. Furthermore, the snack food and fast food industries are built on corn subsidies, making these unhealthy foods extremely cheap to produce and buy. This is why snack foods and fast food restaurants saturate the low-income neighborhoods. Perhaps a more effective health care initiative is to shift subsidies away from corn production, towards diversified farming.

D. Weight as a Function of Income

Being overweight or obese is mistakenly viewed as an undesired consequence of making poor decisions. This belief is based on assumptions and biases. Social factors play an extensive and inextricable role in contributing to the obesity epidemic. Eating healthy is not only expensive but also requires a
general understanding of nutrition and science. Low-income communities are therefore much more likely to experience increased levels of being overweight and obese than middle and upper class neighborhoods. Unfortunately, the poorest members of society count on cheap, calorie-dense junk food for their daily meals.

Another factor that contributes to the obesity crisis in low-income neighborhoods is the adverse characteristics of low-income areas. Access to healthy food is notoriously worse in poor communities. Research has shown "stark racial and ethnic disparities" in the number and type of food stores available in different neighborhoods. Generally, the price of foods sold in supermarkets is less expensive than the price of food sold in convenience stores. Additionally, fresh fruits and vegetables are also more readily available in supermarkets, and minority and low-income areas have a higher rate of convenience stores and fewer supermarkets than other communities.

One study indicates that African-American neighborhoods have half as many supermarkets as White ones. A sharper disparity is seen in Hispanic communities, which have a third as many stores as white areas. The lack of access to supermarkets directly contributes to the high obesity rates found in minorities because fresh fruits and vegetables are less accessible in low-income communities. For example, African-Americans have a 51% greater chance of becoming obese than Whites, while Hispanics have a 21% greater chance when

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129. See generally Sonja ME van Dillen et. al., Understanding Nutrition Communication Between Health Professionals and Consumers: Development of a Model for Nutrition Awareness Based on Qualitative Consumer Research, 77 AM. J. CLINICAL NUTRIENT 1065S (2003), available at http://www.ajcn.org/content/77/4/1065S.full (implying that general knowledge of nutrition and nutritional science can be beneficial in maintaining healthy eating habits).

130. SCI. DAILY, supra note 128.

131. See Op-Ed., No Food Stamps for Soda?, CHATTANOOGA TIMES FREE PRESS (Oct. 9, 2010), http://www.timesfreepress.com/news/2010/oct/09/no-food-stamps-soda/ (stating that the indigent have limited access to healthy food, and often rely on convenience stores for their dietary needs); See generally Anne Harding, Access to Healthy Foods Worse in Poor Areas, REUTERS (Jan. 21, 2009, 2:00 PM), http://www.reuters.com/article/idUSTRE50K5NW20090121 (stating that convenience stores usually charge more for food and generally do not sell healthy, fresh foods).

132. Harding, supra note 131.

133. Id.

134. Id.

135. Id.

136. See id.

137. Id.

138. Id.

139. See Ed Bolen & Kenneth Hecht, Neighborhood Groceries: New Access to Healthy Food in Low-Income Communities, CAL. FOOD POL’Y ADVOC., 5 (Jan. 2003), http://www.cfpa.net/Grocery.PDF (acknowledging that low-income families have lower rates of automobile use, which directly affects opportunities to “purchase fresh produce or other nutritious perishable foods” because of the difficulties of carrying groceries, utilizing public transportation when it is available, and other such barriers).
compared with Whites. The lack of access to healthy foods is directly contributing to the disparity in statistics.

IV. VAT: AN ALTERNATIVE TO THE SALES TAX

A. Two Methods for Taxing Food

There are two types of consumption taxes that can be applied to foods: the indirect point-of-sales tax and the VAT. The former is most commonly used in the U.S. while the latter is popular among the EU member states. The indirect sales tax is applied once at the point of sale while the VAT is applied at every stage of the production and distribution process. All goods sold in the EU are taxed at a rate of 15%. Food and water are excluded from this general rate but their rate may not fall below 5%. Of the EU members, the United Kingdom and France have occasionally played with the idea of increasing the VAT on unhealthy food products in order to control the rise in obesity.

Some of the countries that have explored the possibility of imposing food taxes as a method of curbing consumption have proposed setting the VAT at approximately 17% to 19%. This rate will be levied throughout the production and distribution process. Consequently, when the product reaches the consumer, the price will be higher than if the tax was levied once at the point-of-sale because everyone in the distribution line will attempt to pass their costs to the consumer.

141. See Bolen & Hecht, supra note 139, at 6.
143. Benedict C. Cabaltica, Comparing the Value-Added Tax to the Retail Sales Tax, THE TAX ADVISER (Sept. 1, 2008), http://www.thefreelibrary.com/Comparing+the+value-added+tax+to+the+retail+sales+tax-+at0203028560 (distinguishing the United States from most other countries that rely on the VAT than other tax systems for revenue).
144. Froomkin, supra note 142.
146. Id. art. 98, Annex III §§ (1)-(2).
148. Mytton et al., supra note 81, at 689; Allen, supra note 146.
150. See id.
Revenue from a food-based VAT can be reallocated in two ways. First, the revenue can be deposited in a general fund, which is then divided among a number of state programs that may or may not be health-based. The second method of reallocation is to distribute the revenue only to health-based programs. This may include projects such as building new supermarkets and public gyms in low-income communities, funding local sport teams, and providing stipends to low-income families for the purchase of healthy food products.¹⁰⁰

A point-of-sale tax on junk foods, as used in the U.S., is problematic for three reasons. Taxing only some categories of unhealthy foods will not lower the rate of obesity because consumers will replace one unhealthy food with another.¹⁵¹ This is known as cross-elasticity.¹⁵² Second, the levied revenue goes into a general fund where it is appropriated to a variety of programs instead of going to subsidies for healthy foods and wellness projects.¹⁵³ Lastly, the point-of-sale tax reaches only the consumer instead of reaching everyone in the line of production.¹⁵⁴ This may dissuade some of the consumers from buying the product, but it does not provide any incentives for the producers to diversify their crops or for the retailers to stock stores with healthier options.

Low income families use a larger percentage of their earnings on food than do middle and high-income families.¹⁵⁵ Therefore, it is crucial that an increase in the price of unhealthy food is counteracted by a decrease in the price of healthy foods. An increase in the price of unhealthy foods unaccompanied by decreasing prices of healthy foods will further frustrate the limited resources of poor individuals.

B. How a VAT on Unhealthy Food Can Help

The VAT is regarded as being punitive on the consumer because it accrues at every stage of the production process and it is ultimately passed to the buyer in the form of higher prices.¹⁵⁶ This problem can be offset in a variety of ways. Most

¹⁵¹. "Healthy food" refers to products that qualify as healthy according to the SSCg³d model.
¹⁵². Mytton et al., supra note 81, at 691 (noting that cross-elasticity can lead to the unintended consequence of a substitution of one unhealthy food type for another).

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significantly is the VAT’s potential to create mass revenue for the government, revenue that can be used to subsidize diversified farming, the building of supermarkets in poor areas, and the transportation of perishable, healthy foods to remote locations. These subsidies can also provide an incentive for farmers and retailers to increase the availability of fruits and vegetables in all grocery stores, including stores in low-income neighborhoods.

The VAT can help discourage the production and consumption of unhealthy foods. Take beef for example. The beef farmer, butcher, seller and consumer all pay their share of the tax on beef, restraining its production and distribution. Arguably the producers and retailers are the least affected by the tax because they could pass the additional costs to the consumer in the form of higher prices. However, that is not necessarily the case because, as the price increases, consumption will decrease which will ultimately affect the income of the manufacturers and retailers. To keep business alive, these manufacturers and retailers will have to expand their merchandise to include other types of produce, in turn creating an incentive for harvesting and selling healthy foods.

Promoting policies that help reduce the price of nutritious food will have a positive impact on the economy. Illnesses caused by being overweight or obese lead to an increased number of missed workdays, low productivity, and heightened insurance premiums. The problem is so significant that in 1998 medical costs attributed to weight related issues were estimated at about 9.1% of the total medical expenses in the U.S. This percentage is likely to have increased in subsequent years. With approximately half of these expenses paid by the government, a decrease in overweight and obesity rates could save taxpayers billions of dollars in medical expenses. Therefore, an incentive for improving the health of all people exists both in those countries where the government is the sole healthcare provider, as well as places, such as the U.S., where healthcare costs are covered by a combination of private and public programs.

158. See Jacobson & Brownell, supra note 105.
159. See id. at 857 (stating that revenue from fat taxes can be used to fund health-programs).
160. See Froomkin, supra note 142.
161. See Fry & Finley, supra note 58.
162. See generally Rajeev K. Goel, Obesity: An Economic and Financial Perspective, 30 J. ECON. AND FIN. 317, 317 (2006), available at http://www.springerlink.com/content/f44b4q5g27162351/fulltext.pdf (explaining the direct and indirect economic effects of obesity and overweight); See also Fry & Finley, supra note 58 (discussing the direct and indirect costs of obesity and overweight among members of the European Union).
163. Goel, supra note 162; See also Fry & Finley, supra note 58.
164. Goel, supra note 162, at 321.
165. See id.
166. See id. (citing that half of the U.S. medical costs are paid by Medicare and Medicaid).
C. Is the Point-of-Sale Tax Really Less Effective?

Despite the popularity of the VAT among EU members, the U.S. has not seriously considered taxing consumption by use of the VAT; instead, the U.S. adheres to the point-of-sale tax.\textsuperscript{166} The U.S. does not use a VAT "because liberals think it's regressive and conservatives think it's a money machine."\textsuperscript{167} Liberals are concerned that a VAT system would take more money from the poor than the rich.\textsuperscript{168} But if the poor receive the benefits from its revenue, it is a reasonable trade-off.\textsuperscript{169} Low-income families can benefit from a VAT on unhealthy foods if the revenue goes towards subsidies for fruits and vegetables as well as other health care reform policies.

Despite the acrimonious attitude Americans have toward food taxes, some states have applied some form of the tax to candy and soft drinks.\textsuperscript{170} Although these taxes are commonly referred to as "sin taxes" the purpose behind their application is to raise money for the state.\textsuperscript{171} This is evidenced by the fact that money levied from these "sin taxes" goes into a general fund where its allocation is not very transparent.\textsuperscript{172} Some of the income may be allocated to health related programs, but very little of this money is used to fund subsidies for fruits or vegetables and other programs aimed at improving the disparate health characteristics of low-income neighborhoods.\textsuperscript{173} For example, Texas and California both impose a tax on soft drinks, while Maine and New Jersey apply a sales tax on candy and snacks.\textsuperscript{174} Although these taxes are highly successful at raising revenue for the state government, the income is placed in a general fund where it may or may not be given to healthcare related programs.\textsuperscript{175}

The VAT is used in more than 130 countries, making it the most common system of taxation.\textsuperscript{176} Its popularity can be attributed to its ability to make money for the government.\textsuperscript{177} But despite the VAT's popularity, the U.S. more typically


\textsuperscript{168} Montgomery, supra note 166.

\textsuperscript{169} Id.

\textsuperscript{170} Id.

\textsuperscript{171} Martin Caraher & Gill Cowburn, Taxing Food: Implications for Public Health Nutrition, 8 PUB. HEALTH NUTRITION 1242, 1245 (2007).

\textsuperscript{172} Id. at 1244.

\textsuperscript{173} Id.

\textsuperscript{174} See Jacobson & Brownell, supra note 105.

\textsuperscript{175} Id. at 855.

\textsuperscript{176} See id.

\textsuperscript{177} Montgomery, supra note 167.

\textsuperscript{178} See id. (noting that VAT advocates state "few other options can generate the kind of money the nation will need to avert fiscal calamity.").
levies a point-of-sale tax.\textsuperscript{178} There are nineteen states and cities in the U.S. that levy point-of-sale food taxes, but there is no indication that these taxes have an effect on overweight and obesity rates in those states.\textsuperscript{179} A possible explanation is that these taxes are not intended to promote healthy eating habits, but to increase revenue for the government.\textsuperscript{180} Illustrating this point is the fact that money raised from these taxes is not set aside for subsidies or nutrition programs.\textsuperscript{181} Furthermore, these taxes are applied based on categories of food rather than nutritional content.\textsuperscript{182} Taxing limited category of foods, such as soft drinks or candy, may be ineffective if it fails to account for positive price cross-elasticity, which causes consumers to substitute one unhealthy food for another.\textsuperscript{183}

Lobbying by the snack and fast food industries is another reason why food taxes in the U.S. have been largely unsuccessful at decreasing the rate of obesity.\textsuperscript{184} Pressure from these industries resulted in several states reducing or repealing their snack taxes.\textsuperscript{185} For instance, Louisiana passed a law that repealed a soft drink tax contingent upon Coca-Cola building a bottling facility in the State.\textsuperscript{186} Similarly, Frito-Lay threatened not to build a manufacturing plant in Maryland, unless the state repealed its snack tax.\textsuperscript{187} States are responsive to these threats because revenue and job creation from these industries is substantial.\textsuperscript{188} Using a VAT instead of a point-of-sale tax could generate enough revenue to offset this problem.\textsuperscript{189}

A VAT on unhealthy foods would better impact the rates of overweight and obesity because it turns everyone in the production chain into a money-making machine for the government.\textsuperscript{190} For example, the producer is taxed when it makes

\textsuperscript{178} See Froomkin, supra note 142 (describing the sales tax as “traditional” and noting that it is imposed at the point of sale as distinguished from the VAT).
\textsuperscript{179} See Jacobson & Brownell, supra note 105 (noting that it is unknown whether sales tax and other small taxes have a significant impact on sales and consumption, indicating that any such effect “would be masked by other differences such as pricing, climate, and competitive forces.”).
\textsuperscript{180} Id.
\textsuperscript{181} Id.
\textsuperscript{182} Id.
\textsuperscript{183} Id.
\textsuperscript{184} See Mytton et al., supra note 81 (describing positive cross-elasticity in the case of items which may be substituted for each other and negative cross-elasticity for complementary items).
\textsuperscript{185} See Jacobson & Brownell, supra note 105, at 855 (noting that opposition from the soft drink and snack food industries has been influential in the reduction or repeal of snack taxes in twelve jurisdictions in recent years).
\textsuperscript{186} Id.
\textsuperscript{187} Id.
\textsuperscript{188} Id. at 856.
\textsuperscript{189} See id. (stating that Coca-Cola projected several hundred jobs and $3 million annually in new taxes for its proposed Louisiana plant).
\textsuperscript{190} See generally id. at 855 tbl.1 (discussing the revenue raised by various states from taxes levied on soft drinks and snack foods and the amount of new taxes gained by the states from various industries).
\textsuperscript{191} See Froomkin, supra note 142 (noting that the VAT is imposed at each stage of the production process).
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a purchase from the growers. Similarly, the retailer is also taxed when it makes the purchase from the producer. In other words, the VAT is collected any time a company increases the value of a product through the use of labor and equipment. Therefore, everyone who comes into contact with the food must pay the VAT, creating a greater disincentive to producers, distributors and buyers to produce, distribute, and buy the taxed product.

Experts argue that the downside of using a VAT is the additional cost that will be passed to the consumers. But this is precisely the reason why a VAT on unhealthy foods is better able, than the point-of-sale tax, to reduce the consumption of unhealthy foods. The higher price will divert purchase patterns towards the cheaper, healthier foods. Additionally, using levied taxes to subsidize diversified farming will likely create a shift in production, away from corn and towards a variety of crops.

V. A CASE FOR THE VAT

Among the EU member states, France, Britain and Ireland have all considered increasing the VAT rate on unhealthy foods in order to divert consumption away from these products. Norway, a non-EU country, currently links its VAT on unhealthy foods to their overall national food and nutritional policy.

A. Britain and France

Britain considered imposing a tax on unhealthy foods after research showed that nearly a quarter of the British population is obese. The proposed unhealthy food tax was estimated to prevent more than 3,000 deaths per year. According to one journalist, “a 17.5% price rise on fatty, sugary and salty foods could avert thousands of fatal heart attacks and strokes.” Researchers in the U.K. argue that rating food based on the SSC3gd model offers the most effective form of food

192. Cabaltica, supra note 143.
193. See id.
194. See id.
195. See Montgomery, supra note 167.
196. See id.
198. Caraher & Cowburn, supra 171.
199. See Batty, supra note 98.
200. Id.
201. Id.

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Despite the proven decrease in mortality rate, a common criticism is that the fat tax is regressive because of its potential negative economic impact on low-income families.202 Similarly, in France, increased rates of illnesses related to being overweight or obese spurred a proposal to raise the VAT on certain foods from 5.5% to 19.6%.203 The increased VAT targeted foods high in fat, sugars, and salt.204 As in Britain, the credit crisis forced the French government to halt discussions on the fat tax.205 The rising cost of gasoline had already increased the price on most foods products and depleted the pockets of the poor.206 Increasing the VAT by more than triple its previous rate would penalize the least privileged sections of the population.207

Although the VAT has been criticized for being too regressive,208 increased benefit spending can mitigate the VAT’s negative impact.209 Income from the tax must be used to neutralize the increased price of unhealthy foods by lowering the prices on healthy foods.

**B. Norway**

The primary purpose behind Norway’s food VAT is to encourage a healthy diet that is low in saturated fats but high in whole grains and vegetables.210 Income collected from the tax could be used for subsidies that make fruits and vegetable more affordable.211 The Norwegian Free Fruit School Program (“School Program”) was implemented as a reaction to statistics showing that a majority of Norwegian children did not eat fruits and vegetables in accordance with national recommendations of five portions of fruits and vegetables a day.212

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202. Mytton et al., supra note 81, at 690, 692.
203. Id. at 693.
204. Allen, supra note 147.
205. Id.
206. Id.
207. Id.
208. Id.
209. See generally Sukumar Mukhopadhyay, VAT: A Regressive Tax?, REDIFF INDIA ABROAD (Mar. 21, 2005), http://www.rediff.com/money/2005/mar/21vat2.htm (defining a regressive tax in this way: “[w]hen the ratio of consumption tax to income increases with higher income levels, it is called a progressive tax. When this ratio is proportionate, it is called a proportionate tax and when this ratio decreases it is called a regressive tax.”).
210. Id.
211. A Healthy Diet for Good Health, NAT’L COUNCIL FOR NUTRITION, 12 (June 2005), available at http://www.helsedirektoratet.no/vp/multimedia/archive/00007/IS-1259_Engelsk_7033a.pdf (stating that an increased VAT on “energy-dense, nutrient-poor foods” can reduce the consumption of these foods).
212. See id. at 12-14 (recommending that the VAT on “sugar, chocolate and other foods that contain added sugar” be used for “health-promoting nutrition efforts” such as free fruit and vegetables for children at day-care facilities and primary schools).
213. E. Bere et al., Outcome and Process Evaluation of a Norwegian School-Randomized Fruit and Vegetable Intervention: Fruits and Vegetables Make the Marks (FVMM), 21 HEALTH EDUC. RESEARCH 258,
The School Program was therefore introduced to encourage healthy eating. Studies found that students “ate significantly more fruit and vegetables than students in schools that did not have these programs.” The cost to the parents, per child, for this program was estimated at thirty Euro cents per day.

The Fresh Fruit and Vegetable Program (FFVP) in the U.S. shares similar goals to the program implemented in Norway. Administration for this program comes from the Department of Agriculture and it is managed at the state level through the State Department of Education. The purpose of the FFVP is to provide fresh fruits and vegetables to children in schools. An integral part of the program has been the introduction and expansion of courses intended to educate students about nutrition and health.

In 2008, funding for the FFVP was $40 million per year, permitting 1,956 schools nationwide to participate; however, the number of participating schools in 2011 is expected to rise since funding for the program was increased to $150 million. This program can help reduce childhood obesity by educating children about nutrition and by helping them develop better eating habits. But despite the success and popularity of the FFVP, funding restrictions limit the number of schools allowed to participate. Imposing a VAT on unhealthy food can offset the existing financial limitations by creating revenue that could be used to support programs such as the FFVP. Additionally, by redirecting subsidies away from corn products and towards diversified farming, the price of fruits and vegetables will decrease substantially as farmers grow more fruits and vegetables. Through lower prices on fruits and vegetables, schools can more readily provide nutrient-rich foods to students as part of the school lunch program.

218. Memorandum, supra note 216.
219. Id.
221. See FFVP, supra note 217.
224. See Barrionuevo, supra note 24 (explaining that government subsidies promote the growth of corn, and therefore similar incentives could be used to promote the growth of fruit and vegetables).
C. Canada

The Canadian Food Mail Program is a government-subsidized initiative intended to provide affordable fruits and vegetables to remote and isolated areas. Canada’s vast distances and hostile weather conditions make it difficult and expensive to transport perishable foods to the Northern areas of the country. A decrease in the average price of fruits and vegetables can result in a decreased number of heart disease and stroke cases. This is particularly important because Canada has a publicly funded healthcare system; therefore, the federal government plays a key role in providing health care for its constituents. Furthermore, because the healthcare system is public, there is strong incentive to keep person healthy.

The purpose of the Food Mail Program is to increase the availability of fruits and vegetables in rural areas, by subsidizing the shipping and transportation of these perishable goods. This program led to “a significant increase in the consumption of fruits, vegetables, and dairy products when the subsidy for transportation increased from 30 to 80 cents per kilogram.” Without these government subsidies the success of the Canadian Food Mail Program may be impossible.

One reason why fruits and vegetables are expensive is their short life span. Perishable items must be transported quickly and efficiently in order to prevent unnecessary loses. Subsidizing transportation of these items keeps prices low and ensures that the essential vitamins and minerals found in foods and vegetables are available to all remote areas of Canada.

VI. THE QUESTION: TO FAT TAX OR NOT TO TAX FAT?

Taxes are currently being used in the U.S. to decrease the consumption of alcohol and cigarette use. State taxes levied on tobacco and alcohol have

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226. Id.
227. See Hughes, supra note 112.
229. Id.
231. CAPI, supra note 214 (discussing how transportation subsidies have helped increase the consumption of fruit and vegetables).
232. See id. (discussing how the Canadian Food Mail Program is government subsidized).
233. See id. at 47.
234. See id.
235. Id. at 27.
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significantly lowered the use of these products among young and low-income consumers. For example, research indicates "that a ten percent increase in the total price of cigarettes can reduce overall cigarette consumption by three to five percent, with much more dramatic reductions in target groups like youth and children." As with cigarette and alcohol taxes, the government can promote safe and healthy communities through effective food tax policies.

The current point-of-sale food tax employed in the U.S. is not effective at reducing the incidents of obesity. As part of the national effort to fight obesity, the federal government should implement a VAT on food products that rate unhealthy on the SScg3d scale. To reach this objective, the government needs to simultaneously implement a tax-allocation initiative that redirects levied income into subsidies for diversified farming.

A. A Correlation Between Price and Consumption

Increasing the price of unhealthy foods is likely to reduce overall consumption. Simone French, a professor at the University of Minnesota, examined price reduction strategies that promote the purchase of healthy foods. These experiments demonstrate a strong correlation between the price of food and consumer choice. French's experiment examined the effects of price reduction at twelve work-site vending machine and twelve secondary schools in Minnesota. The vending machines at each site were filled with low fat snacks that were reduced in price by 10%, 25%, or 50% relative to the higher priced fat snacks.

According to these studies a reduction in the price of healthy snacks was associated with a decrease in sale percentage of higher fat snacks. As the price of low fat foods decreased by 10%, the sale of that food increased by 9%. Similarly, a decrease of 25% yielded an increase of 39%, while a decrease in price of 50%, resulted in a 93% increase in purchase. Based on these statistics, a decrease in the price of healthy foods by 25% or more has a significant impact on the sale of that food.


237. Id.
238. Id.
239. See Jacobson & Brownell, supra note 105 (discussing how revenue from sin taxes levied in the U.S. are allocated into a general government fund, rather than towards healthcare-related programs).
240. French, supra note 77, at 842S-843S.
241. See id.
242. Id. at 842S.
243. Id.
244. See id. at 843S.
245. Id. at 842S.
246. Id.
A price reduction program targeting fruits and vegetables yielded the same results when implemented in two school cafeterias. The first school was in a predominantly Caucasian, middle-income, suburban area. The second school was in an urban area and consisted of a mixed ethnic and socio-economic population. Fresh fruits and vegetables were sold in vending machines and were targeted for a 50% price reduction. This reduction in fruit price resulted in an increase in sale from fourteen items per week to sixty-three items per week, which is 4.5 times the original amount. Similarly, a decrease in the price of baby carrots increased the sale of carrots from thirty-seven packets per week to seventy-seven packets.

Low priced foods are attractive to consumers. In fact there is a clear and direct relationship between the price of food and the food purchased. Therefore, the disparity in price between healthy and unhealthy foods offers one explanation for the American obsession with cheap and affordable foods that are high in saturated fats and refined sugars. Imposing a tax on unhealthy foods can remove some of the incentives for purchasing unhealthy foods. Similarly, using tax subsidies to decrease the price of healthy food can positively influence food choices among consumers.

Others argue that if the government insists on reducing obesity, then a tax on unhealthy foods is not the best means of achieving this goal because it is not well targeted, not simple, and not transparent. In other words, it fails every element of a reasonable tax policy. Although this may be the case for the traditional methods of taxing unhealthy foods, which is based on food category, these concerns diminish when using the SSCg3d model. The SSCg3d model will help promote transparency by accurately predicting what foods to tax and at what rate.

B. A U.S. VAT on Unhealthy Food?

Implementing a successful food tax in the U.S. should be regulated by the federal government. As a starting point, the U.S. should follow the model applied by the EU. Like the EU member states, states in the U.S. should have the discretion to set their own VAT rate, as long as the rate falls within federal guidelines. Determining what foods to tax should be a task for the federal government. This will provide homogeneity among the states, and will dissuade
people from going across the border to a different state in order to buy the same unhealthy food at a better price.

Establishing what constitutes a “taxable food” will be challenging, but the SSCg3d model can be used as a starting point. The tax can be applied in two ways. It could be applied only to those foods scoring higher than nine on the SSCg3d scale, or to all foods scoring a 3 and higher. Because a score of 3-8 constitutes an intermediate rating, while a 9 and higher is considered high, the foods with an intermediate score could be taxed at a lower rate than foods scoring 9 and higher.

Levied income should be deposited into a federal fund. A predetermined amount of the income is then given to the Department of Agriculture, where all of the money must be used for the purpose of subsidizing foods that rank lower than three on the SSCg3d scale, such as fruits and vegetables. The remaining money is then allocated to the states based on a formula that is proportional to the amount of money the state contributed to the federal fund. The states should use this money to fund health-based projects in communities afflicted with highest rates of obesity.

VII. A VAT CAN HELP FUND HEALTHCARE REFORM

Virtually all of the EU member states have government sponsored universal healthcare. The U.S. is among the few industrialized nations that do not have a government-run unified healthcare system that can serve anyone; instead the U.S. has thousands of private insurance plans. Despite this noticeable absence, some states have made an effort to offer some form of publicly funded healthcare. The most prominent has been Massachusetts who created public option insurance intended to rival private insurance companies. The public option is partially funded by the state and is implemented alongside private insurance companies. The public option creates competition for the private sector by setting industry wide standards. The success of this program hinges on the competitive aspect of the free market system; people favor high quality services, therefore, only

255. Mytton et al., supra note 81, at 690 (a score of 3 on the SSCg3d model constitutes a rating of intermediate).
259. Id.
260. Id.
those products that offer the highest quality will survive. An effect of the public option is to set a high minimum standard of quality that competes with the private insurance companies.\textsuperscript{261}

The purpose for the public option is to offer competitive, high quality insurance coverage to everyone.\textsuperscript{262} This means that there are more restrictions on who can be turned away from coverage.\textsuperscript{263} On the other hand, private insurance companies are for-profit businesses that have a high incentive to deny coverage to individuals with pre-existing conditions.\textsuperscript{264} Like the private insurance companies, the public option is designed to meet the costs of coverage by pooling risk.\textsuperscript{265} Pooling risk is an easy concept—the higher the number of people paying into the pool, the more money there is to be distributed from the pool, stabilizing and lowering the average cost per member.\textsuperscript{266}

Although the U.S. does not have a national public option, the momentum to develop some form of universal insurance is growing.\textsuperscript{267} Having a cradle-to-grave public insurance program creates a strong incentive to promote policies that improve the overall health of the population. Adopting a national public healthcare policy at this time will be very costly because of the high incidents of obesity. A public healthcare system will give the U.S. government an incentive to invoke food policies that counteract the obesity epidemic. A VAT on unhealthy food is one way to address this problem. The tax will deter the consumption of unhealthy food. Additionally, because the VAT is a money-making machine, levied revenue can be allocated to health-related programs as well as subsidies for diversified farming.

VIII. POOR HEALTH AND NATIONAL SECURITY

National security has been cited as a reason for promoting the healthcare reform in the U.S. President Truman and First Lady Michelle Obama have recognized the possible adverse implication poor health can have on national security.\textsuperscript{268} In fact, the origins of the National School Lunch Program (NSLP) are

\begin{itemize}
\item \textsuperscript{262} Id. at 2.
\item \textsuperscript{263} See id.
\item \textsuperscript{264} See id.
\item \textsuperscript{266} Harbage & Davenport, supra note 261.
\item \textsuperscript{269} Penny Starr, \textit{First Lady Credits School Lunch Program for Bolstering National Security}, CNS
deeply rooted in economics and politics. President Harry Truman started the program in 1946 as a response to the growing number of adult men being turned away from military service due to health problems caused by poor nutrition. According to Truman, failing to meet the minimum physical standard to enroll for military service created a national security problem that had to be addressed immediately. The NSLP was intended to promote healthy eating habits from an early age so as to prevent undesirable health consequences in adulthood.

In February 2010, First Lady Michelle Obama announced an ambitious national program, “Let’s Move”, aimed at decreasing rates of childhood obesity. The objective of this program is grounded in the supposition that healthy children make healthy adults; promoting good eating habits at an early age can prevent adult overweight and obesity. Like President Truman, First Lady Obama linked the program to national security. In order to qualify for the armed services, men and women need to meet a minimum physical standard. This standard is becoming increasingly harder to satisfy due to increased obesity rates. The “Let’s Move” program addresses a strange paradox: overweight individuals can be malnourished. Calorie-dense food is not necessarily high in nutrients; therefore, individuals who consume these foods gain weight but continue to lack the nutrients necessary for good health. The National School Lunch Program is intended to remedy this problem by encouraging healthy habits from an early age.

The NSLP works by allowing participating school districts or independent schools to receive subsidies and independent commodities from the U.S. Department of Agriculture for each meal they serve. In return for these subsidies, the participating schools must conform to certain nutritional standards set by the federal government. Although the government establishes the nutritional requirements, the foods served and the preparation methods are at the discretion of the individual school. In addition to meeting the nutritional


271. Id.

272. Id.

273. Id.


275. See id.

276. Richardson, supra note 270.

277. Office of the First Lady, supra note 274.

278. See id.


280. Id.
requirements, the meals must be offered for free or at a reduced price to all eligible students.\textsuperscript{280}

The NSLP has its drawbacks. The free meal program is only eligible to students from families with incomes at or below 130\% of the national poverty level.\textsuperscript{281} Those children with families that fall between 130\% and 185\% of the poverty levels are also eligible, but must pay a reduced price for the meal.\textsuperscript{282} Children from families with income over 185\% do not qualify for the program.\textsuperscript{283} It is estimated that approximately 12\% of U.S. families fall below the poverty line.\textsuperscript{284} Based on this statistic, the majority of school children nationwide does not qualify or benefit from the NSLP. Invoking a VAT on unhealthy foods can offset this problem in two ways by diverting consumption away from unhealthy foods and by using revenue to provide subsidies for programs, such as the NSLP and the FFVP.

\noindent IX. CONCLUSION

Change comes from action, not from mere talk. Now more than ever, our government must do something to counteract the growth of obesity and overweight in children and adults. The purpose of this Comment has been to analyze the benefits of invoking a VAT as a means to decrease costs associated with overweight and obesity. A successful VAT must meet two purposes: the tax must deter consumption of unhealthy foods and its revenue must be used to promote subsidies for healthy foods and fund health care initiatives. Although the VAT has been regarded as a regressive tax, expanding benefit programs can offset these concerns. Invoking an unhealthy food VAT in the U.S. will result in a decisive reduction in the rates of overweight and obesity and save the U.S. billions of dollars each year.

\textsuperscript{281} Id.
\textsuperscript{282} Id.
\textsuperscript{283} Id.
\textsuperscript{284} Id.