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### Weighing In: A Critical Analysis of New York City's Calorie Labeling Law

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# CRITICAL ANALYSIS OF NYC CALORIE LABELING LAW

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**Title:**

Weighing In: A Critical Analysis of New York City's Calorie Labeling Law

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### Abstract

According to the National Health and Nutrition Examination Survey, the amount of obese U.S adults has nearly doubled over the last thirty years.<sup>1</sup> Given that obesity significantly increases one's risk of diabetes, many refer to the obesity epidemic as the "obesity-diabetes" or the "diabesity" epidemic. New York City (NYC) has been uniquely affected, ranking number 8 nationally, among cities with highest rates of obesity and diabetes.<sup>2</sup> The main policy response to this epidemic has been to increase access to nutritional information with the hope that educating consumers about nutritional content will lead to healthier food choices. The NYC Board of Health has led the way to combat these health threats by establishing three initiatives: a ban on trans-fat, a city registry of those with diabetes, and menu-labeling. The most notable has been the controversial enactment of Article 81.50 of the NYC Health Code (calorie labeling law) in July 2007. This law requires that all chain restaurants with 15 or more establishments post calorie information on menu boards; affecting approximately 2,400 NYC restaurants which makes up 10% of all fast service establishments in NYC. This paper will critically explore the impact of this law on consumers and fast food producers as well as examine the debates regarding the way municipal power has been used to address the obesity-diabetes epidemic.

This paper offers a compressive review of Article 81.50 (calorie labeling law) in New York City through the use of primary and secondary data in the form of Department of Health and Department of Finance policy reviews, peer-reviewed studies assessing effectiveness of Article 81.50 (calorie labeling law) in New York City, as well as primary data including interviews with key informants such as, public health officials, corporate interests, and government officials. The synthesis of secondary and primary sources is systematically analyzed examined through a critical lens. The theoretical and critical lens employed in this article draws from a comparison articulating critical comparison in the approaches to the obesity epidemic by public officials by those in London as compared to New York. As such, this work highlights ways in which New York City local government possess a unique and powerful position to address both obesity and diabetes. Thus, this article provides readers an in-depth and diverse perspective of the debate concerning to the role of public health policy as it pertains to regulation of health and bodies through food consumption. Lastly various cultural, political, and economic obstacles, which impact the effectiveness of the legislation Article 81.50 (calorie labeling law).

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### Introduction

#### *Obesity and Diabetes as a Critical Health Problem in NYC*

Obesity and diabetes rates have increased across the nation particularly affecting the health of New Yorkers. Obesity rates in NYC have increased by more than 70% over the last decade. According to New York City Department of Health and Mental Hygiene (NYC DOHMH) Community Health Survey conducted in 2005, 54% of NYC adults are overweight or obese, while 21.7% are obese. This survey also indicated that 43% of elementary school children are overweight or obese.<sup>3</sup> The estimated annual deaths attributable to obesity rank second as the leading preventable cause of death in the United States. More than 70% of deaths in New York City in 2005 can be attributed to obesity related illness such as heart disease, stroke, diabetes and cancer.<sup>4</sup>

Paralleling the increase in obesity, diabetes has increased drastically. Diabetic adults are 40% more likely to be overweight than non-diabetic adults. In NYC, the adult population that has been diagnosed with diabetes has increased by 250%.<sup>5</sup> The NYC DOHMH estimates that 700,000 New Yorkers have diabetes, which is 12.5% of the adult population. In addition, 23.5% of adults have pre-diabetes. Combined, this demonstrates that more than one third of the NYC adult population are living with, or risk of, diabetes.<sup>6</sup> In 2004, 4,865 New Yorkers were on dialysis or receiving kidney transplants and in 2005, there were 3,040 extreme amputations all due to diabetes. Additionally, more than 100,000 New Yorkers have eye damage from diabetes and approximately 9,000 New Yorkers have been blinded by diabetes.<sup>7</sup>

The alarming rates of both obesity and diabetes have disproportionately affected lower income areas. NYC Health Commissioner, Thomas Frieden, states, “Diabetes follows obesity like night follows day and higher rates of obesity tightly correlate with poverty in this country and in New York City.”<sup>8</sup> Large income disparities exist in NYC; the poorest areas (South Bronx, northern Manhattan and the Brooklyn/Queens border) have the highest rates of obesity and diabetes. There is also an ethnic component to this. African-Americans and Hispanics are more

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likely than whites to live in lower income areas and thus more likely to be at risk of obesity or diabetes.<sup>9</sup>

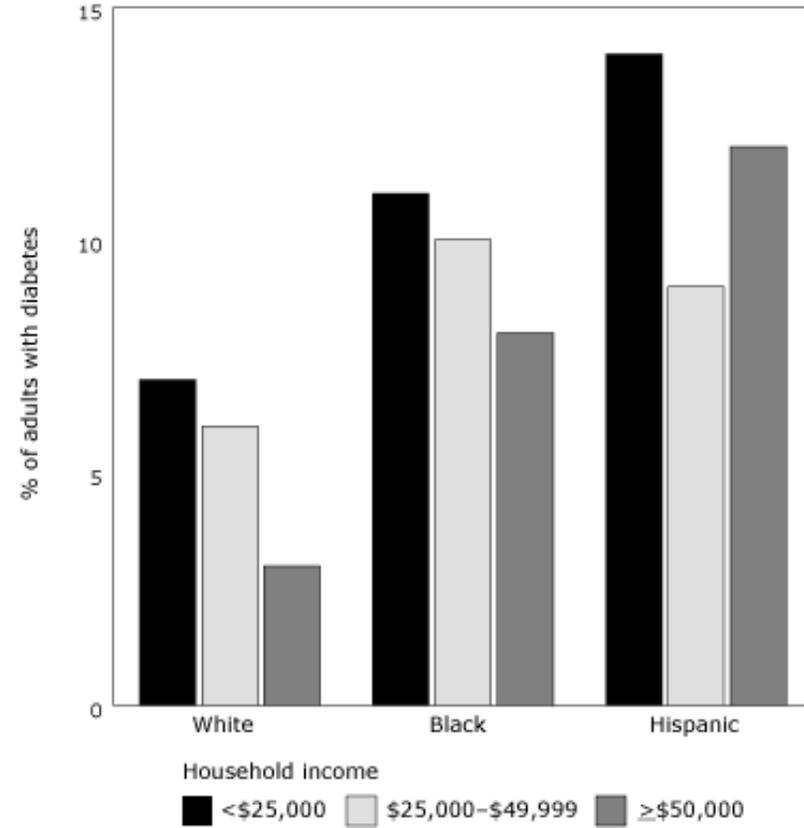
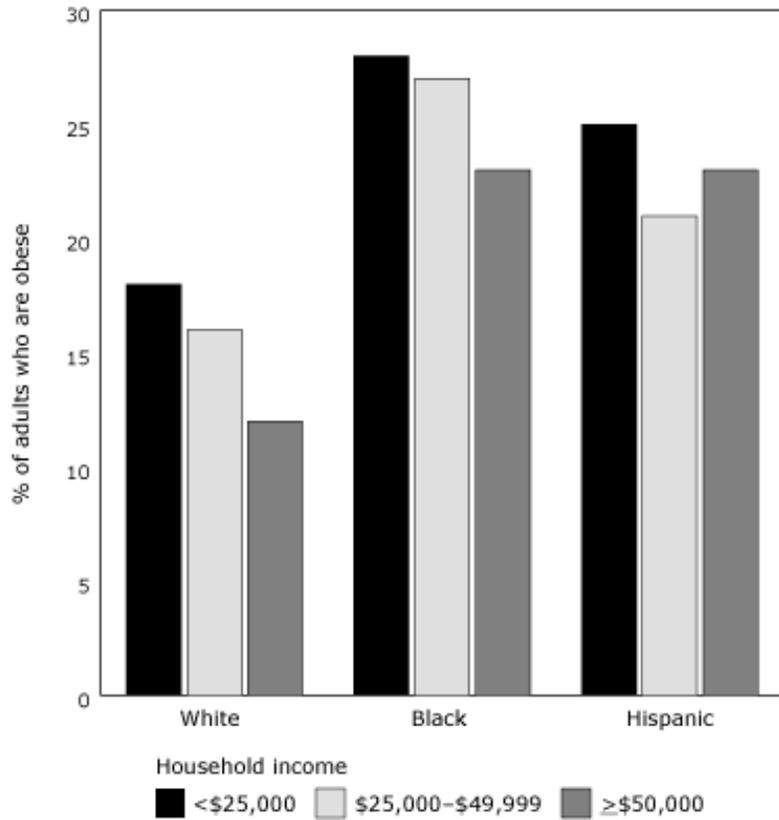
New York City is racially diverse, currently consisting of 35% whites, 25% blacks, 27% Hispanics, 10% Asians, and 3% mixed-race or other ethnicity. Studies indicate only 27% of whites are currently living in a household with an income less than \$25,000 followed by Asians (32%), blacks (42%), and Hispanics (46%). Although 12.5 % of the NYC adult population has diabetes, it is highest among Asians (16.0%), followed by blacks (14.3%), Hispanics (12.3%), and whites (10.8%). Furthermore, despite similar levels of income, whites have lower rates of obesity and diabetes compared to African-Americans and Hispanics (see Figures 2 & 3).<sup>10</sup> A 2004 study of elementary school children found that Hispanic children had the highest rates of obesity (31%), followed by African-Americans (23%), Whites(16%) and Asians (14.4%).<sup>11</sup> These findings indicate there are clear socioeconomic discrepancies that exist in the “diabetes epidemic”.

Researchers claim the main causes of this current epidemic are changes in the world’s food and physical activity environment.<sup>12</sup> Though the “diabetes epidemic” is multifaceted, studies indicate increased caloric intake (which is due to the rise of meals purchased outside the home) plays a significant role in the rise of obesity and diabetes.<sup>13</sup> There are various policy models used to address this epidemic, which are dependant on the specific governmental structure. In NYC, the main policy response to this health crisis has been to increase the consumer’s access to nutritional information in hopes that it will influence consumers to purchase healthier food items. The most notable has been Article 81.50 of the NYC Health Code, which requires fast food establishments to post calorie information. Exploring the way other industrialized cities (apart from the US) have responded to this health crisis may be helpful in illustrating the unique authority NYC government has in addressing this epidemic

### **Comparison of Municipal Responses to the “diabetes” Epidemic**

In the drafted report titled, *The Tale of Two ObeCities: Comparing responses to childhood obesity in London and New York City*, researchers draw similarities between London and New York City. This report illustrates how both cities are similar in not only size and diversity, but also in that high levels of income disparity contribute to the rise of obesity and

**Figure 3:** Percentage of New York City Adults with diabetes and their household income, by racial/ethnic group.



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diabetes. Both London and New York City's response to this epidemic have been shaped by their approaches to municipal governance, health care, public transportation and education.

Examining these differences may help both cities to improve the current tactics used to combat the "diabesity" epidemic.<sup>14</sup> I will focus on the New York City local government's unique and powerful position to address both obesity and diabetes. Most specifically, the passing of the calorie labeling law (Article 81.50) that has been praised for its potential to combat the "diabesity" epidemic.

London and New York City differ in the structures of their municipal, regional and national governments, which shape the response to the "diabesity" epidemic. For example, in the United Kingdom, the national government has the primary responsibility for health care and education, which provides consistent funding for these critical services, but limits London in terms of local action. In London, city government has minimal control for health care and public health. Local governmental powers (executed by the Mayor of the county) include issues of spatial and economic development, transport, air quality and culture. The Mayor in London is not as powerful as the Mayor in New York City and because of this London's Mayor faces many difficulties when implementing health policy.<sup>15</sup>

Unlike London, New York City local government has a very powerful role in executing health care and education services. With regard to health care, the city's Health Code gives city government distinctive powers to advance public health. Under the city charter, the Board of Health is granted the authority to add provisions to the Sanitary Code to ensure the security of health for the city. In 1866 the Health Code was created and modified regularly with the intent to allow public health officials the opportunity to modify health regulations without going through the legislative process.<sup>16</sup>

Over the last five years, the Board of Health appointed by the Health Commissioners and the Mayor has used their power to address the "diabesity" epidemic. Recently, The Board of Health has issued laws requiring laboratories to report test results indicating diabetes to a city registry (2006), requiring restaurants to eliminate artificial trans-fat in the food served (2006), and the groundbreaking law that requires chain restaurants to post the calorie information on menus (2007). Many health advocates have high hopes for this health initiative and those living

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in London find the unique authority of local government to implement such laws as having great potential in combating the “diabesity” epidemic.

### **Claims Made to Support the Implementation of Article 81.50**

The New York City Department of Health and Mental Hygiene is responsible for preventing and controlling disease. Obesity and diabetes rates are rampant in New York City thus it is the duty of the NYC DOHMH to address such issues. The federally mandated nutritional labeling on packaged food (Nutrition Labeling and Education Act, United States Food and Drug Administration 1994) has been instrumental in shaping healthier food choices. Studies conducted by the FDA have indicated that three quarters of consumers pay close attention to calorie information on Nutrition Fact Panels and nearly half indicate this information affects their food choice.<sup>17</sup> Other studies have also suggested that consumers find calorie information the single most important piece of nutritional information. The calorie section is both the most noticeable, and the most frequently considered part of the Nutrition Facts Panel; 73% of consumers reported that they seek out calorie information on the Nutrition Facts Panel when purchasing packaged food.<sup>18</sup> Under NLEA, restaurants are not required to post nutritional information which is perceived by public health officials as problematic because studies suggest that consumption of high caloric food are more likely to be purchased away from home and obtained in restaurant establishments. Furthermore, these studies indicate that those who eat food away from the home have a significantly increased risk of becoming obese.<sup>19,20</sup>

The rise in consumption of away-from-home foods has been facilitated by the dramatic increase of restaurant chains, which serve convenient, inexpensive large portions and calorie dense foods. Over the next 5 years, the number of fast food establishments is projected to increase from 266,300 to 287,437 establishments within the United States.<sup>21</sup> Currently, in New York City, approximately 90% of restaurants serve fast food.<sup>22</sup> Fast food chains are predominantly located in lower income areas. A study conducted by NYC DOHMH states that the population residing in Harlem is that of a much lower income than in the Lower East Side. The study indicated that in Harlem 1 out of 7 restaurants are fast food establishments, while in the Lower East Side 1 out of 25 restaurants are fast food establishments.<sup>23</sup> Due to the fact that

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obesity and diabetes is prevalent in lower income areas these findings suggest that fast food establishments play a significant role in the rise of obesity among on the working poor.

In addition, a 2007 survey of customers of chain restaurants in New York City reported that one third of meals purchased outside the home contained more than 1,000 calories. This is half the amount of the recommended caloric intake for an entire day.<sup>24</sup> Many other studies supporting this finding also indicate that high levels of fast food consumption are significantly correlated with higher BMIs (body mass index).<sup>25</sup> This sheds light on both an economical and cultural obstacle when addressing the rise of obesity and diabetes. Economically, fast food is cheaper and as shown, less healthy. Fast- food is convenient and cheap which serves the needs of the working poor thus, eating such food has become a cultural norm. This is why fast food chains with 15 or more establishments have been targeted under Article 81.50. Though, despite such obstacles, public health officials have clearly defined reasons to believe calorie information provide New Yorkers with the critical information needed to make healthier food choices resulting in the reduction of obesity and obesity related illnesses

### **Lawsuits, Political Disputes and Cultural Tensions**

The NYC government is in a unique and powerful position to implement such laws and this has resulted in much controversy. New Yorkers have expressed their skepticism of this law on many Internet blogs ranging from psychology forums to diet discussion boards. Some simply argue this law will not effectively address the “diabesity” epidemic, claiming it will simply raise awareness and not impact behavior. On a popular psychology forum, both social scientists and New Yorkers expressed that understanding what motivates individuals to consume healthier food is far too complex of a relationship to be remedied by a simple calorie labeling law. Others feel this is an abuse of power and consumers have the right to eat as they please. This notion is illustrated in many comments on blogs/forums that use the quote “ignorance is bliss” to support their opposition to this law.<sup>26,27,28</sup>

A popular non-profit organization dedicated to promoting personal responsibility and protecting consumers choices, The Center for Consumer Freedom has created print advertisements in New York Newspapers( to express their feelings towards the way in which the NYC DOHMH has executed their power to control the health of New Yorkers. This is most

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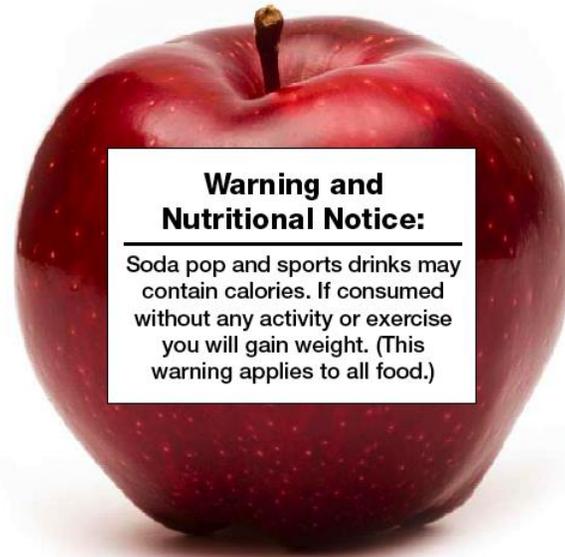
evident in their ad<sup>29</sup> that reads “Big Apple or Big Brother”[see figure 4]. The rest of the text printed in this ad expresses that calorie posting strictly on fast food items is useless because they claim, “all foods are created equal”. Also, they emphasize a less public issue which is physical activity. Their position on this issue is further defined on their website, where they refer to public health officials and other forms of authority as “food police”. They claim the government has no right to tell Americans what is good or bad to eat, highlighting the dominant individualistic ideology and “personal responsibility” discourse used among Americans and corporate entities.<sup>30</sup>

The New York State Restaurant Association, an organization dedicated to serving, protecting and educating New York restaurant owners, adopts a similar position with regard to the abuse of authority. The New York State Restaurant Association (NYSRA) took action by filing a suit (and an appeal) against the NYC DOHMH, which prolonged the enactment of Article 81.50. The NYSRA felt this regulation was unfair for it only applied to approximately 10% of restaurants in New York City, and was enforced through fines. The NYSRA felt that fines, as a failure to comply with this law was discriminatory because this regulation did not apply to all restaurants. Those lawyers who represented the chain restaurants in this lawsuit claimed enforcement of menu-labeling unfairly target chain restaurant owners over “mom-n-pop” restaurants. The court expressed that due to the ubiquity, frequent consumer consumption and the critical role fast food products play in the increase of BMI it is in the best interest of the public for the government to target such chain establishments. The court decision turned in favor of the NYC DOHMH stating that the government is legitimately treating food establishments according to their relative influence on the health of the public.<sup>31</sup>

The NYSRA argued that New York's regulation was “preempted by federal law and violated restaurant owners' rights of free speech”.<sup>32</sup> The NYSRA claimed that The Health Code stated that no state or local government can make additional requirements for nutrition labeling that differ from those of the federal Nutrition Labeling and Education Act(NLEA). Since NLEA excluded restaurants, the implementation of Article 81.50 differs from NLEA thus unconstitutional. Another claim made by NYRSA stated that Article 81.50 violates federal law because NLEA prohibits states and local government from regulating how restaurants communicate nutritional information about their products. In addition, the NYSRA has argued making food selections<sup>33</sup> which is a message the NYSRA disagrees with. Furthermore, they

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# Big Apple or Big Brother?



After tackling margarine on bagels in New York, the New York Department of Health ~~Hype~~ is attacking soft drinks. Priorities?

*For more information, go to:*

**ConsumerFreedom.com**

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Paid for by The Center for Consumer Freedom

**Figure 4:** "After tackling margarine on bagels in New York, the New York Department of ~~Health~~ Hype is attacking soft drinks. Priorities?"<sup>34</sup>

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argued that this regulation is not achieving the government's objective in that restaurants already provide dietary information. They argued that restaurants should not be penalized for providing nutritional information in other ways aside from menu boards. The NYC DOHMH responded that this regulation requires restaurants only to disclose a fact and not a value judgment. The board of health also provided evidence that posting this information on menu boards is the most effective way to reach consumers.<sup>\*, 35</sup>

In September 2007, a federal district court granted in favor of the NYSRA, but the decision was overturned “on the fact that the board had applied its regulation only to restaurants that voluntarily made disclosures regarding calories; the court suggested that a mandatory regulation could be permissible.”<sup>36</sup> In response to Article 81.50 violating the First Amendment the federal court rejected the NYSRA’s arguments, claiming that “free speech makes a careful distinction between requiring disclosure of simple facts and forcing a speaker to express a viewpoint.”<sup>37</sup> The board of health reintroduced a revised version of Article 81.50 on October 24, 2007 which required fast food restaurants with 15 or more establishments to post calories on all menu boards in the same font and size as the presented food item. After a public hearing, the board adopted the revised rule on January 22, 2008. In February 2008, the NYSRA again sought to hinder the enactment of Article 81.50 making the same claims. In April, the district court ruled in favor of the board of health and refused to delay enforcement of this regulation while the NYSRA appealed the decision in the Second Circuit Court of Appeals.<sup>38</sup>

Although Article 81.50 is opposed by the restaurant industry, the public hearing revealed it has significant public support. The board of health took New Yorkers comments quite seriously reviewing more than 2,200 public comments on the menu-labeling regulation, which indicated that 99% of New Yorkers approved of this ruling. Despite the controversy, both the public’s well-received response and the final ruling to adopt Article 81.50 under the NYC Health Code can be seen as an important victory in NYC DOHMH’s effort to combat the “diabetes” epidemic.<sup>39</sup>

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\* Some restaurants voluntarily provide nutrition information to their customers, but most of these efforts have failed to inform the majority of consumers. Prior to calorie labeling being mandatory, studies indicated only 31% responded seeing calorie information. Thus, making the claim that calorie labeling on menus is the most effective way to inform patrons of nutritional information

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Even though this is a victory, the debates discussed above had a great influence on prolonging the enactment of Article 81.50 which highlights ideological and structural barriers the NYC DOHMH must overcome when attempting to address obesity and diabetes. Both the claims made by the Consumer Freedom organization and NYSRA demonstrate the prevailing individualistic ideology that many New Yorkers have, especially when regarding health. On the contrary, the NYC DOHMH is advancing a collective ideology that recognize personal caloric intake as a publically relevant social problem. Given this, it is plausible to state that the court's ruling is in favor of the NYC DOHMH's ideological framework, in that the ruling granted the Department of Health with the unique authority and responsibility to protect the health of New Yorkers. Only time will tell if the policy implemented by the DOHMH will stress either the individualistic ideology pertaining to health or a more collective ideological frame.

### **Fast Food Subsidies in New York City**

Before examining the impact calorie labeling has had on both consumers and the restaurant industry, it is important to mention other government programs executed by the NYC Department of Finance that may encroach on public health officials' efforts to lower the rates of obesity and diabetes. Scott Stringer, the Manhattan Borough President, has brought public attention to this issue in his May 2008 report entitled "Senseless Subsidies". His main claim is that the government has the responsibility to establish regulations that align private profit with the public interest; a responsibility that he sees as not being met by the government. "Senseless Subsidies" presents a policy analysis of The Industrial and Commercial Incentive Program (ICIP) to provide evidence for the modification of policy.<sup>40</sup>

The "Senseless Subsidies" report circulated throughout all departments of the NYC government approximately one month before the state senate reformed ICIP with the purpose of raising awareness of certain 'senseless subsidies'. His report indicated that this program granted \$350,150 in tax forgiveness to thirteen Manhattan fast food restaurants, five of them located in lower income areas where there are current City-sponsored campaigns to combat obesity and diabetes.<sup>41</sup> This is a serious problem because of the convincing data that suggests fast food establishments serve unhealthy and calorie dense foods, which are seen as the root causes to increasing obesity and diabetes rates. So if this program encourages such establishments to locate

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in low-income areas where there are high rates of obesity and diabetes it may worsen these critical health disparities. In this report Mr. Stringer states,

It is a gross understatement to say that these City expenditures run counter to the public interest. The fast food restaurants receiving ICIP benefits neither are in danger of departing Manhattan and New York City for another location, nor are they creating jobs that justify government support... There is no defensible policy rationale for subsidizing fast food restaurants under ICIP. Any re-authorization of the program should bar such subsidies in the future. The dollars lost on fast food restaurants could be used to address looming budget shortfalls or to support healthy initiatives.<sup>42</sup>

This policy analysis concludes that the current fast food establishments receiving tax breaks may be doing more harm than good; the dollars given to such establishments could be used on other government health initiatives. Despite this warning, the Industrial Commercial Abatement Program (formerly ICIP) was signed into state law by Governor Paterson on June 30th, 2008 and signed into local law by Mayor Bloomberg on October 10th, 2008. The ICAP program currently in effect continues to provide fast food restaurants an incentive to locate in lower income areas where obesity and diabetes are rampant by use of government subsidies. This is extremely problematic because the ICAP program may increase existing health disparities by encouraging establishments serving unhealthy fast food to locate to low-income areas where there are extremely high rates of obesity and diabetes, which may impede on the effectiveness of government health initiatives in the same areas.

To make sense of why two contradictory government initiatives exist in the same areas I conducted an e-mail exchange-interview with the lead researcher for the “Senseless Subsidies” report, Stephen Corson. An analysis of the interview identifies two key issues that impact the city government’s efforts to effectively address the “diabesity” epidemic. One being that the city has limited power compared to that of the State. Secondly, are the difficulties government officials face when trying to balance stimulating the economy and advancing the health of New Yorkers. Mr. Corson used the example of ICAP to identify these problems.<sup>43</sup>

The legislation that enables ICAP comes from the State Assembly & Senate and will be in effect until March 1, 2011. Mr. Corson and Mr. Stringer’s office lobbied very hard prior to the shift from ICIP to ICAP in June 2008 for the removal of subsidies for fast-food restaurants north

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of 110th street.<sup>\*44</sup> Their efforts were ultimately defeated and ICAP was passed as initially proposed. Since then, Mr. Stringer's administration has had some discussions with undisclosed members of the State Senate to amend ICAP and prohibit any fast food restaurants in the City from receiving new ICAP benefits. Unfortunately, there has been no solid progress on ICAP in the Senate since June.<sup>45</sup>

Mr. Corson brought my attention to the June 6th coup which was a very influential factor in freezing progress on ICAP reform. On June 6th there was a coup that threw the Senate into disarray and changed the leadership structure that the Democrats put in place (when they regained the majority) at the beginning of 2009.<sup>46</sup> Due to this call for the reorganization of Senate leadership, all of the business that the Senate was planning to work on was frozen for over a month. When an agreement on the Senate leadership was finally put into place, the session was over and most of the introduced legislation that had been initiated before June 6th was not acted on. He explained that prior to June 6<sup>th</sup> there were discussions with an undisclosed State Senator to create legislation that would not allow tax subsidies for any restaurant that is required to post calorie counts. Mr. Corson states,

After the coup those conversations ceased. The NYC Mayor's office opposed the revocation [of fast food subsidies], despite the arguments that we made in Senseless Subsidies ...To be blunt, I think the biggest barrier to reforming the ICAP program and removing certain types of subsidy is the State Senate as they are in the best position to modify their own program.<sup>47</sup>

This debate over subsidies under ICAP highlights the political, structural and economic barriers City government officials face when changing State legislation, and the problems that arise when City officials have differing perspectives on the same State legislation due to strains of balancing economic initiatives and health care regulation.

Given that the State has a much more powerful role over health and social services, the City failed to influence the State's decision regarding ICAP, which Scott Stringer's administration and other public health advocates perceive as encroaching on the city's specific health initiatives.<sup>48</sup> Even though the State Senate considered the modification of ICAP the Senate was forced to address a time sensitive issue on June 6<sup>th</sup>, which included reorganizing the

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\* North of 110<sup>th</sup> is part of the "new" zoning under ICAP where many low-income communities reside and where the City government have implemented health initiatives to lower the high rates of obesity and diabetes.

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leadership structure, thus preventing the reform of ICAP that would remove subsidies to establishments that are required to post calories. Another reason ICAP may have not been reformed is that Mayor Bloomberg was not active in the push to modify ICAP. The Mayor has made it clear that the health of New Yorkers is his main priority, but it is also his responsibility to stimulate an economy currently in a recession. Even though the Mayor did not publicly provide a clear rationale as to why he did not push harder to remove fast food subsidies, it is plausible to state the Mayor's rationale was influenced by the fact that he had to juggle economic stimulus programs (ICAP) and health care initiatives simultaneously. Unfortunately, in this particular case the health issue was compromised which in the future may affect the city's poorest residents.

Gerald Frug, of Harvard Law School, attempts to clarify why finance rather than health takes the foreground when policy is being modified. Frug claims that the varying government departments do not have as strong of a unified voice as that of the financial sector.<sup>49</sup> This seems to be case with regard to ICAP. ICAP was created to keep businesses in New York City by offering a tax exemption for increased property value, which would gradually increase over time. As Mr. Stringer has stressed it is crucial to modify and reform this program for the costs outweigh the benefits, but any effort to restrict the fast-food industry would meet opposition.<sup>50</sup> . Fast food restaurants have very powerful and influential lobbyists. In this case, pre-existing subsidies provided such establishments even more power; giving unhealthy fast-food establishments the extra capital to use on advertising and lobbying which advances their influence and dominance. Scott Stringer sees this a viscous cycle that must be stopped.<sup>51</sup>

Frug further observed that building a city based on concern for social justice "takes a back seat" because private interests such as the financial sector, food services and real estate developers typically have a more unified voice than that of the government or advocacy groups. When these groups differ about policy that affects the "diabesity" epidemic as they did regarding zoning changes to limit the density of fast food outlets (ICAP reform debate), private interests tend to have more access to critical resources and skills to attain their policy goals.<sup>52</sup> This could be why the health issue was placed in the background. Also, it is reasonable to state that those from the NYC Department of Finance may have felt that ICAP would finically benefit such areas that currently lack economic growth. This crucial economic crisis might have overshadowed the

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need to address the health issue. Regardless of the motives for not removing the fast food subsidies, this debate over ICAP resulted in two contradictory government initiatives that may deepen existing health disparities among low-income groups. Given this, we should encourage all sectors of government to make fighting obesity and diabetes a main priority.

### **Public, Commercial and Political Impact of Article 81.50**

There have been 3 studies examining the impact of New York City's menu labeling law on consumer behavior. In October 2009, the first study was published in the journal of Health Affairs. Independent researchers from both New York University and Yale conducted this study to examine the impact calorie labeling has on low-income groups whose populations have an increased risk of obesity and related health problems. Researchers collected receipts and surveys from 1,156 adults at fast-food restaurants both before and after calorie labeling went in to effect. In addition, the researchers conducted a comparison study between Newark and New York City. As adults were leaving fast food restaurants, their receipts were collected and the foods they purchased were confirmed, along with a brief survey.

Prior to calorie labeling, the study found no difference in the percentage of people who saw calorie information in New York City and Newark. After calorie labeling was introduced, the study indicated a significant increase in the percentage of New York City respondents (54%) who reported noticing calorie information, while in Newark there was no change. Due to the fact that calorie labeling is not present in Newark these findings indicate that calorie labeling impacts consumer's awareness of caloric information. 27.7% of NYC respondents who saw the calorie labels reported that this information influenced their food choices and approximately 88% of this group indicated that they purchased fewer calories. However, the food receipts of these consumers confirmed that they did not actually purchase fewer calories. In addition, this study provided no evidence for differing responses to labeling based on sex, race or age. In sum, this study suggests that menu labeling regardless of sex, race or age appears to increase awareness of calorie content, but has little to no impact on the amount of calories purchased.<sup>53</sup>

The two lead researchers behind this study, Victoria Brescoll and Brian Elbel, voiced their opinion on the findings. Brescoll states, "The take-away isn't that menu labeling doesn't work... There needs to be other concurrent interventions, such as educating people about daily caloric intake". Dr. Elbel noted that this study is a crucial first step in assessing the effectiveness

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of calorie labeling, and suggests more research to be conducted among low-income groups given their increased health problems. With regard to commenting on the findings of this study he states,

Food choice is a complicated and multifaceted. Altering such choices is difficult, and understanding the role of calorie labeling is an important first step. Perhaps a combination of approaches—such as increasing the availability of healthy foods and making these foods more affordable—is needed to combat the obesity epidemic.

The other two studies that examined the impact of menu labeling supported both the initial findings and claims made by Dr. Elbel.<sup>54</sup>

In May 2009, American Economic Review published an article titled, “Strategies for Promoting Healthier Food Choices”. Researchers from Carnegie Mellon University presented the results from two experiments investigating the impact of providing nutritional information on purchasing behavior. Researchers examined the purchases of 1,479 McDonald’s customers in New York City in 2007 and 2008, which assessed purchasing behavior both prior to and after Article 81.50 went into effect. They went beyond just measuring the impact of labeling, by providing diners with the recommended amount of daily caloric expenditure with the anticipation that this information would provide adequate context to make sense of the posted calorie information. However, findings suggested that both calorie labeling and context of daily caloric intake did not impact the amount of calorie consumption, nor was the interaction between the two significant. With regard to specific groups, researchers found dieters compared to non-dieters were 71% more likely to order a low calorie item; indicating that calorie labeling may only impact those who are already health conscious. This finding demonstrates that calorie labeling may not be the most instrumental way to alter poor eating habits.<sup>55</sup>

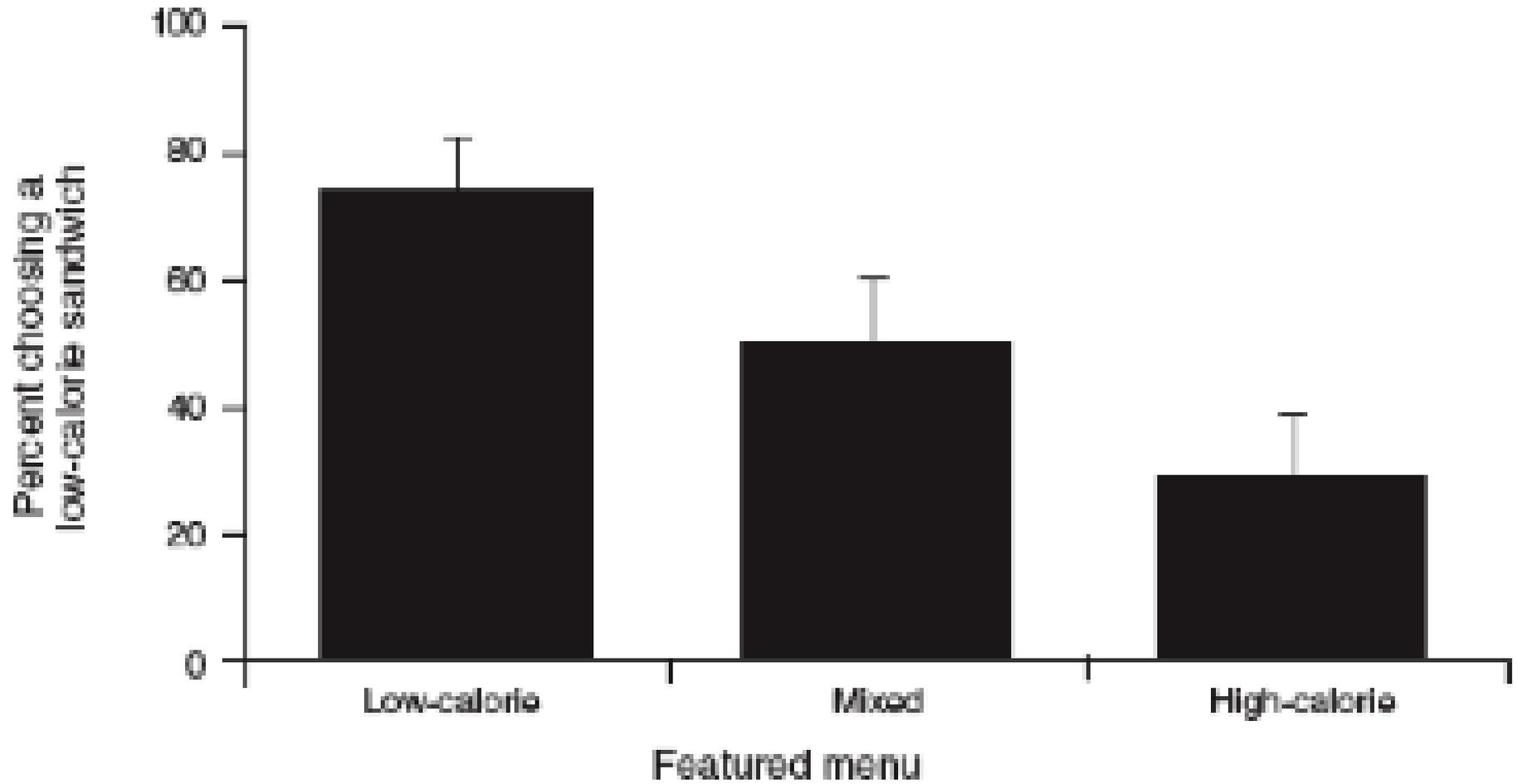
The most convincing and revealing finding was that convenience manipulation had the strongest impact on food choice. Convenience was manipulated by asking each subject to choose a food item off a menu created by the researchers and to complete a survey. Researchers created 3 different types of menus categorized by the amount of calories; low calorie menu, high calorie menu, and mixed. To maximize validity, researchers told subjects their interest was in the survey and not in the meal choice. The findings indicated that consumers were more likely to choose a lower calorie item when it was more convenient to do so. Not surprisingly, compared to the mixed menu those who received the low calorie menu were 48 percent more likely to choose a

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low-calorie item whereas those who received the high calorie menu were 47 percent less likely [see figure 5]. This suggests that when compared to other studies, providing consumers with more healthy food items has a greater impact on purchasing behavior than providing nutritional information.<sup>56</sup>

Due to the fact that these two studies indicate that menu labeling has little impact on purchasing behavior those supporting menu labeling have emphasized the third study, conducted by the NYC DOHMH. The full data from this study have not been published, but major news networks (Reuters, The National Post of Canada) have reported that researchers found significant reduction in caloric intake. The National Post of Canada reported ‘A study of chain restaurants in New York City, where it is mandatory to list calorie content on the menu, found that consumers were consuming on average 106 calories less per visit.’<sup>57</sup> However, this was not the case as Julie S. Downs, George Loewenstein and Jessica Wisdom made public in the op-ed piece released in The New York Times, “Eating by Numbers”. What the study actually found was only a 23-calorie reduction per patron at Starbucks. Regarding the 106 fewer calorie claim, the study revealed that in 2009, 56% of New Yorkers noticed calorie labels, but only a quarter of that 56% said they used this information when ordering. Among this group, consumers bought 106 fewer calories than those who did not notice the information, but this group only represents 15% of total consumers making the news claim invalid. Given the fact that correlation does not equate to causation along with the significant findings from the other two studies, it is plausible to state that calorie information may not have been the motive behind choosing a lower calorie item.<sup>58</sup> Regardless of the motives behind this slight decrease in calories, the crucial learned point is that the majority of data indicates that calorie labeling has little to no impact on purchasing fewer calorie items.

However, it is important to note that this study found the number of calories purchased at Subway increased significantly throughout the duration of the study. Researchers claim this was attributed to the high percentage of customers purchasing 12-inch sandwiches (from 28 percent to 73 percent during the study period).<sup>59</sup> This sharp increase occurred when Subway was conducting its "\$5 Foot-long" advertising campaign. This suggests that intensive marketing of large portion sizes may defeat the effects of calorie labeling. While these findings are



**Figure 5:** Percentage of participants who chose a low-calorie sandwich as function of the "featured" menu <sup>60</sup>

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disappointing they also suggest there is a good chance consumers would purchase healthier food items if quick service establishments offered healthier food options at lower price. Using the power of marketing to encourage consumers to purchase more nutritious food items may enhance the potential of calorie labeling to effectively address obesity and diabetes. Given this, I suggest more research be done in this area to maximize the potential calorie labeling may have on influencing consumers to purchase healthier food items.

These studies shed light on the decision-making process regarding food choices. When it comes to deciding what to eat it, Warren Balesco states that it is based on a “rough negotiation- a pushing and tugging” between identity, convenience and responsibility.<sup>61</sup> While these studies indicated that convenience plays the strongest role in the decision process other studies suggest price influences food choices,<sup>62,63</sup> which in a way can be categorized as a component of convenience. In sum, New Yorkers may find convenience, over identity or responsibility, as the most influential factor when purchasing food. However, it is important to note that this quantitative data (used in these studies) is not insightful enough to reveal the intricacies and complexity of consumer behavior regarding food choices, but these studies *do* isolate key factors that influence eating behavior. This is very beneficial, for identifying these factors can inform policy makers resulting in the creation of more effective programs and laws to address the “diabesity” epidemic.

Despite the little impact calorie labeling has shown to have on food purchases, the rise in attention about the relationship between food and health has led many fast-food restaurants to take up healthy initiatives by providing more healthy food options. The most predominant fast food establishments in NYC are Dunkin Donuts, McDonalds and Burger King and as public health officials predicted<sup>64</sup> all three of these corporations have made a significant effort to make their menu items healthier. McDonalds officials stated, “We are committed to doing what is right for our customers and we will continue to work diligently to make sure that McDonald's food can be part of a balanced diet.”<sup>65</sup> McDonalds has introduced more salads, all natural dressings and more fruit into their menu. Due to the fact that these more nutritious options are fairly new, reports on the sales of such items were not available, but based on the McDonalds website they plan to continue offering healthier food choices.<sup>66</sup>

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Dunkin Donuts has also created a healthier menu with the recent creation of the DD Smart Menu, which was created by Dunkin Donuts's Nutritional Advisory Board comprising of certified nutritionists and chefs. This menu offers lower fat milk for their coffee, reduced-sugar fruit smoothies, multi-grain bagels, egg white options to breakfast sandwiches, and low-fat muffins. Dunkin Donuts has distributed many press releases claiming they will continue to modify their menu to meet the needs of their health-conscious consumer base.<sup>67</sup>

Burger King has made significant changes to their menu as well as distributing a Corporate Responsibility<sup>68</sup> report discussing the ways they have been addressing the obesity epidemic. In this report, they state that they have created product innovation teams to work with trained chefs and certified nutritionists to create healthier menu options. For example, they have increased the amount of establishments carrying BK Veggie burgers, which have much less, fat and calorie than that of their classic hamburger. For Kids, they have introduced Apple Fries as an alternative to 'French fries' on their children's menu. In 2008, Burger King mimicked Dunkin Donuts creation of a Nutrition Advisory Panel including "leading health and nutrition third-party experts in areas ranging from sports and nutrition education to nutrition-related medical research".<sup>69</sup>

Although these changes may not have been specifically because of New York City's menu labeling law (these modifications apply to all states), this shift to healthier menu options is exactly what public health officials hoped for. Whether or not these healthier food items are being purchased by those groups at risk of obesity or diabetes is up for debate. Nonetheless, this clearly demonstrates the willingness of corporations to meet the demands of a health-conscious consumer base, which is promising given the recent studies<sup>70,71</sup> indicating that the healthier items on a menu result in more individuals purchasing such healthier items.<sup>\*,72</sup>

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\* Some are skeptical and concerned by these modified fast food menus and such concerns are expressed by individuals on Internet food forums about the actual nutritional ingredients used in fast food products. For example, one woman expressed great concern about a particular Au Bon Pan item that supplemented natural sugar for an artificial sweetener in order to lower the amount of calories on the item. She considered this to be a health risk due to the harms associated with consuming artificial sweeteners. While this is just one woman, comments below this blog posting, showed support. Since there is no scholarly work or valid data to support the claims made by these individuals I believe more research should be done on the details of what exact ingredients are being used to make these food items low in calories and fat because good nutrition is based on both calories and content.

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### Conclusion

The recent health care reform bill being debated in the Senate identifies calorie labeling as being a critical tool to fight the “diabesity” epidemic in America, which illustrates the great influence New York City’s calorie labeling law has made on the nature of public health policy. However, studies reveal such laws may not be enough to truly reverse this epidemic for calorie labeling seems to have little impact on the amount of calories purchased. The authors of “Eating by Numbers” put it best stating,

By helping consumers make more informed decisions, calorie posting may be desirable even if it fails to reduce calorie intake. But effective policies to deal with obesity will need to involve much more than posting calories. People eat too much because calorie-dense foods are convenient and cheap, with large portion sizes priced to encourage overeating.<sup>73</sup>

This comment on the analysis clearly articulates that effective policies to reduce obesity and diabetes rates must go beyond posting calorie information for the root cause of this epidemic is multifaceted. The complex nature of this problem along with the ideological and structural barriers government officials face, have made it very difficult to effectively address this critical health issue. Based on my analysis, I believe that it will take the effort of not only the government, but of corporations, health advocates, communities, and individuals to successfully combat the “diabesity” epidemic.

Given the factors I have explored with the case of Article 81.50, I have identified the political, cultural and economic obstacles that can inform further research in public health policy. Thus, I suggest more research be conducted on the effectiveness of other public health policy to address both obesity and diabetes to ensure that the existing health disparities among New York City residents are remedied.

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