My name is Chirag Raval and I would like to thank the New York State Senate Standing Committee on Health for the opportunity to testify today as an advocate for improving cardiovascular health. I am a New York Life Graduate Fellow at the Colin Powell Center for Policy Studies and a Ph.D. candidate in Biomedical Engineering at the Graduate Center of the City University of New York. I have spent the past four years studying atherosclerosis—specifically the earliest events of the disease that involve low-density lipoprotein adhesion to the vessel wall. As these lipoproteins, or fat molecules, accumulate they contribute to the hardening of the vessel. Currently there are no drugs approved by the FDA for fighting this stage of the disease, and atherosclerosis is responsible for 34 percent of American deaths a year according to the American Heart Association 2009 Heart Disease and Stroke Statistics. Obesity and atherosclerosis are typically concomitant risk factors, especially in the case of coronary heart disease. Obesity leads to a shortened life expectancy—on average, six to seven years less than people of average weight and is linked to high blood pressure, high cholesterol, diabetes, heart disease and stroke. The first line of defense in preventing atherosclerosis is a healthy diet and exercise, and a prerequisite for healthy behavior is education. Thus, public awareness is a critical component if policy making is going to have an impact on long-term cardiovascular health in New York State.

As a resident of Harlem, I have seen the inadequacy of caloric labeling in the continued, if not increased, viability and popularity of cheap yet unhealthy fast food. For a meal at less than five dollars, the value for the buck is unbeatable. It doesn't matter if the caloric label is branded on the chicken; the monetary value obscures the long-term consequences of this unhealthy choice. Each weekday, when the local schools let out, the neighborhood fast food restaurants are filled with youngsters already hooked on the saturated fat, sugar, and salt characteristic of these unhealthy food options. Though caloric labeling has been proven to promote healthier dietary choices in the general public, research suggests that it is less effective in lower-income demographics. Additional measures are clearly needed to increase public awareness on the dietary implications of menu items on long-term cardiovascular health.

According to a 2009 study published in Health Affairs the estimated annual cost of obesity-related diseases is \$147 billion a year, accounting for nearly 10 percent of medical spending, with half of that cost financed through Medicare and Medicaid. Children are becoming heavier at an alarming rate, with nearly 10 million 6- to 19-year-olds overweight nationally. In the future as adults, these children will

have a much greater risk of developing and dying from chronic diseases. Yet even with the monumental financial costs associated with obesity, there are no checks in place to provide adequate warning to consumers of the associated cardiovascular risk with high calorie dietary choices. In fact, establishments such as McDonald's or Burger King often advertise the low cost of available items on their storefronts, with absolutely no regard for the health risks that consumption of their menu items poses. Scientific research has proven such high calorie foods pose a serious risk to long-term cardiovascular health and contribute to increasing obesity. Researchers attribute the Western diet, consisting of excessive empty and fat-laden calories, as the leading culprit of the epidemic of atherosclerosis and obesity in the United States. The foods available in a typical fast food restaurant exemplify this harmful diet. Though caloric content begins to address the lack of consumption awareness in the general public, it does not go so far as to categorize certain establishments as the overall unhealthy choices they have become in terms of long-term health and well-being. If we do not act now, obesity will only continue to get worse, which will lead to an astronomical increase in health-care related costs as well as deaths from cardiovascular diseases.

In 1970 the Surgeon General deemed cigarettes dangerous to one's health and from then on cigarette packaging included a warning stating the health risk associated with smoking. The evolution of the antismoking campaign started with a modest caution and has now developed to a robust and effective public policy responsible for significant reduction in the number of smokers and heart attacks in New York and the rest of the nation. Just as smoking was proven to pose a serious risk to cardiovascular health, obesity is also a major risk factor. The comparison between smoking and obesity is obvious in terms of the risk it poses to cardiovascular health. If this is the case, establishments profiting from exploitation of economically disadvantaged communities by advertising cheap high calorie food choices should include a warning to consumers stating the health risk associated with consuming such foods. Just as a caution was the first action in changing the public's attitude to smoking, so would a similar warning at fast food restaurants begin to ingrain a better understanding of the serious cardiovascular risk associated with eating high calorie foods.

In economically disadvantaged areas, people too often are concerned only with the monetary implication of their dietary choices. If nothing is done this tendency will only continue the deterioration of overall cardiovascular health. Including a public warning, similar to the Surgeon General's warning on cigarettes, at establishments that supply high calorie food choices would meaningfully improve

public awareness of the implications of diet to obesity. Furthermore, it would also likely provide incentive for such establishments to provide healthier dietary choices in their menus to avoid having to display cardiovascular health warnings to their customers. Though this change would require only modest resources to implement, it would go a long way in changing the public's awareness toward unhealthy dietary choices and improving the long-term outlook of cardiovascular health in U.S. communities. It took 40 years for the Surgeon General's warning to lead to today's low smoking rates. We do not have the luxury of 40 years to stop the obesity epidemic; so bold action is necessary to shape the future and improve the long-term health of our communities. We owe it to ourselves, and we owe it to New York. Thank you.