Dallas Food Deserts: Analysis, Qualitative Research, & Recommendations

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Dallas Food Deserts

Analysis, Qualitative Research, & Recommendations

A Public Policy Proposal by the
Southern Methodist University Ethics Design Team
Sponsored by the CAREY M. MAGUIRE CENTER FOR ETHICS AND PUBLIC RESPONSIBILITY

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August 2, 2011
INTRODUCTION

This study is the result of a yearlong project undertaken by the Southern Methodist University Ethics Design Team, a group of four undergraduate students advised by one graduate student, and sponsored by the CAREY M. MAGUIRE CENTER FOR ETHICS AND SOCIAL RESPONSIBILITY. The students identified food ethics as their topic for the year, and focused the topic to a research and advocacy project aimed at addressing the health inequalities present in Dallas food deserts. In urban areas, food deserts are areas that have limited or no access to fresh food within a one-mile radius, along with a high prevalence of fast food restaurants and convenience stores. Multiple studies have shown that incidences of obesity, diabetes, and heart disease are higher in these areas than in areas with more ready access to fresh food.

At the outset of the project, the Ethics Design Team found that the Institute for Urban Policy Research at the University of Texas, Dallas had produced a report in 2007 titled “Access to Grocery Stores and Food Security in Dallas.” This report produced a map of access to grocery stores for the entire city of Dallas, and further explored the dynamics of personal food choices and business location decisions, largely from an economic standpoint. This report did an excellent job of describing the characteristics of the Dallas food environment and identifying factors that accounted for the state of the food environment. With the benefit of this report, the Ethics Design Team endeavored to produce a complimentary report that focused on the socially constructed and maintained foodways that exist in Dallas food deserts. Foodways are distinct from food environments in that food environments provide a description of a physical built environment, whereas foodways describe the patterns of life that occur within that environment. Taken together, the two reports offer valuable complimentary data.

The Ethics Design Team (EDT) decided to focus on a smaller, more manageable subset of the population for their research project. Establishing a
partnership with a former SMU graduate and local South Dallas resident, the EDT was able to connect with a group of high school students in South Dallas, an area where food deserts are prevalent. With these research partnerships established, the EDT decided to focus on the foodways of those students and their peers.

Researching foodways demands research methods that allow those who participate in the foodways to describe their values, habits, and perspectives. The EDT determined to use a recently developed ethnographic approach that utilizes photographs taken by the research participants as a means of describing their social processes, perceptions, and values. This approach is referred to as “photovoice,” or “photo-elicitation.” The EDT modeled their research methods and approach on a study recently completed in Philadelphia by researchers from the University of Pennsylvania.

This report, therefore, examines the foodways of high school students in South Dallas in order to record these students’ perspectives on health factors in their daily lives. Based on their perspective, this report also identifies policies that might foster healthier foodways and, in turn, healthy and high-performing students. This policy white paper begins with a review of the research literature related to food access. It proceeds to describe the research conducted in collaboration with The Turner Twelve, a select group of high school students from Lincoln High School in South Dallas mentored by educator and coach, John Carter. The report concludes by drawing upon that research to recommend policies aimed at facilitating and supporting a healthier food environment and food culture.

**FOOD ACCESS RESEARCH**

Lack of access to nutritious food is a problem that affects the lives of many Americans. In 2009, at least 23.5 million Americans lacked access to a supermarket or grocery store within a mile of their homes, and almost 8% of Americans had no accessible source of fresh-food nutrition. These areas, sometimes referred to as
“food deserts,” are highly concentrated in low-income areas where the only food options are what can be found at a convenience store or fast food restaurants. With their street address a primary factor, these children, adults, and elderly face much higher risks of disease, malnutrition, and hunger.

The term “food desert” appeared only in the 1990’s as a term applied to the health implications of a lack of access to affordable healthy foods in certain geographical areas.² Twenty years of focused research in this field has yielded the firm conclusion that disparities in access exist in numerous places in the United States, while evidence in other wealthy countries remains equivocal.³

Perhaps it comes as no surprise that food deserts are synonymous with low income and minority areas.⁴ The research literature into food deserts often defines lack of access to affordable healthy foods as a lack of access to grocery store or chain supermarkets, which sell more healthy foods at better prices than do alternative food outlets such as convenience stores. By this definition, African American populations have half as much access to chain markets as Caucasian populations, controlling for other factors and Hispanics one-third the access of non-Hispanics.⁵ Lower income neighborhoods also have less access to chain grocery stores than do middle- and upper-class neighborhoods.⁶

Mari Gallagher, a leading researcher in food deserts, especially in the cities of Chicago and Detroit, emphasizes the need for a food balance in a community. For Gallagher, food balance means the ability to easily choose between mainstream (grocery stores and supermarkets) and fringe food stores (fast food restaurants, gas stations, convenience, and liquor stores).⁷ Achieving Gallagher’s objective across racially disparate communities will take concerted effort, especially in light of the trends in food access, which are chronicled by Powell’s longitudinal study of food deserts based on zip codes. This study indicates that predominantly African-American communities (70% and higher) experienced the smallest increase in overall availability to grocery stores, and the corresponding largest decrease in these stores, in comparison to predominantly Caucasian communities.⁸

Access to healthy foods, or the lack of access, has profound public health implications. To take just one example, an increased access to convenience stores
has clear associations with an increased risk of obesity.\footnote{9} On the other hand, access to plant-based foods—whole grains, fruits, vegetables, nuts, legumes, healthy vegetable oils and the like—proves beneficial for preventing cardiovascular disease.\footnote{10}

Not surprisingly, one of the major policy recommendations of research addressing food deserts is to increase the number of full service grocery stores and/or supermarkets in these communities. Yet, “[Powell] cautioned against assuming that the presence of a supermarket that sells healthier foods will always lead to better diets, especially without taking account of price.”\footnote{11} In fact, many households that indicate a lack of access to food they want or need also indicate that they lack adequate money for food. It remains difficult to determine whether access or income proves a greater barrier for such households.\footnote{12} Other types of policy change suggestions include more viable farmer’s markets in the community, purchasing incentives for small store owners, introducing healthy food into corner stores, lower pricing for fresh foods, and the like.\footnote{13}

Today, discussion revolves around improving and expanding research agendas, and new research agendas will result in further refined policy proposals. For example, much of the past research into food deserts documents the disparities between communities in accessing retail food outlets or explores the connection between neighborhood environment and either dietary intake or weight-status outcomes, like obesity.\footnote{14} Some scholars combine these methods in order to both understand the importance of location as well as food product availability, pricing, and other in-store characteristics.\footnote{15}

Still, most panelists at a recent (2009) food desert research workshop sponsored by the Institute of Medicine and the National Research Council, agreed that more qualitative research is needed.\footnote{16} Qualitative research focuses on the stories and lifestyles of those who live in the food deserts. Results from such a qualitative study into food deserts in Philadelphia, conducted by researchers at the University of Pennsylvania, were published in the year following the 2009 food desert research workshop.\footnote{17} The Philadelphia study intended to investigate the foodways of three communities in the city, which manifests and propels culture,
identity, and health. The researchers employed a method variously called photo-elicitation, photo voice, or photo-novella. Community members took pictures of things that they felt facilitated or inhibited the health of residents, and then discussed their photos with only a few prompts from interviewers. Community members raised, of their own accord, concerns over a lack of supermarkets and the problems with the prevalence of unhealthy food choices in corner stores, especially those marketed to children. However, community members also raised issues of health related to Stop and Go markets, because their focus on selling alcohol seemed to promote on-site sales of drugs and other illicit paraphernalia. Community members also identified Chinese take-out restaurants as a health danger, especially to mental health, as the take-outs reminded the African-American respondents of race-related economic exclusion, the stores promoted racial/ethnic tensions, and acted as the site of hostile merchant-customer relationships.

DALLAS FOOD DESSERT RESEARCH

In 2007, UTD professors Nathan Berg and James Murdoch produced a definitive study on access to grocery stores in the city of Dallas. Berg and Murdoch’s research proceeds on the premise that education based outcomes often produce little to no effect on healthy food choices when the food environment provides no real healthy food options at a reasonable price. Their research utilized geo-spatial data to map neighborhood according to the number of grocery stores within one mile. The variables—lack of access to grocery stores, median income level, and number of clients in Texas Health and Human Services Commission programs—provided a base for understanding whether current food supplies achieved “satisfactory food security.”

The map produced by Berg and Murdoch shows a number of neighborhoods in southern Dallas with no store within one mile. More specifically, their findings report that at least four zip codes “likely face the double challenges of severe
financial need and nutritional deficits.”

Though their study does not enumerate these zip codes, other UTD studies identify the 75215 area code in historical South Dallas as one of the poorest zip codes in Dallas, a zip code also on Berg and Murdoch’s list of zip codes with no mainline grocery stores. This is also the zip code where Lincoln High School is located. The SMU Ethics Design Team decided to conduct a qualitative study in this zip code that would compliment the broader quantitative study conducted by Berg and Murdoch. In order to identify a wide range of factors at play in Dallas food deserts, and to respond to the concerns of those directly affected by food deserts in Dallas, the EDT undertook their research recognizing that food desert concerns would likely be related to other issues in the community context. Therefore, the EDT aimed to develop a holistic approach to investigate the entire health context in which the students operate. The photovoice approach met those requirements most effectively.

**Study Design and Deployment**

Photovoice is a recently developed approach to ethnographic research, which aims to facilitate participant response with minimal intervention from the researcher. It does so by stating a question broadly and asking the participants to answer it with photographs that they take within the course of their daily activities. In this instance, the research was modeled on The Health of Philadelphia Photo-Documentation Project led by researchers at the University of Pennsylvania. The EDT project utilized the same research question (“Is [Dallas] a healthy place to live?”), similar participant preparation regarding ethical and safety guidelines, and parallel photovoice research methodology. The EDT study differs from the Philadelphia study in that the participants were high school students. EDT decided to focus on student’s perspectives because these tend to have special influence in policymaking decisions and they provide a picture of the food behavior patterns of the generation reaching adulthood in the coming decade.

The participant group consisted of The Turner Twelve, twelve high school seniors attending Lincoln High School in South Dallas. The students were college-
bound, maintained high GPAs, and active in school activities. While such high-achieving students do not represent the entire school population, they were identified as ideal participants for this survey due to their ability to think critically, to effectively articulate their insights, and to partner responsibly and reliably in the research process.

Fig. 2: Research Process Overview

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<tr>
<th>Photographs</th>
<th>Interviews</th>
<th>Analysis</th>
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<tbody>
<tr>
<td>• Disposable cameras</td>
<td>• Group:</td>
<td>• Transcribe interviews</td>
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<tr>
<td>• Capture images that answer the question</td>
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<td>• Find themes</td>
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<td>• Fit into everyday life</td>
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Once the students agreed to participate and the informed consent forms signed by both students and parents were collected, the students were trained to participate in the study and were given disposable cameras. The students took thirteen usable pictures on average, over the course of ten days. EDT members then conducted interviews with each student, which were recorded and then transcribed. Firstly, students were asked to give each photograph a title, and then place each of them in one of three piles: healthy, unhealthy, or both. Interviewers next asked students to select the “top three most important photographs.” They were asked to explain why the three were important and then to share their definitions of each aspect of the research question: “important” (for whom?), “Dallas” (is where?), “healthy” (means what?), “live” (means what?). Finally the students explained how they experienced the three in their everyday lives, or how they fit into a “life story.”

After analyzing this data, the researchers held two subsequent focus groups, where all the students and the researchers discussed the collected data and the evolving analysis and interpretation of that data. In the first focus group meeting,
the students were invited to compare their photographs and to identify photographs from their peers that they wished they had taken themselves. Here, the researchers shared some of the preliminary findings and interpretations, and asked the students to comment and add to them. In the second focus group, the researchers discussed various policy proposals that might stem from the data and asked the students to share their ideas on which would prove most valuable and successful, and which should be tabled.

Photovoice Research Results

The Ethics Design Team posited a number of hypotheses at the study’s outset. The team anticipated these common themes:

- Concern over the lack of access to healthy foods
- Concern over the prevalence of fast food franchises
- Photographs heavily weighted toward the “unhealthy” category

The results were more complex than what the team originally anticipated. For example, students did not express a great concern over the lack of access to healthy foods. This is likely due to the fact that these students generally do not shoulder the responsibility to feed their families nor obtain the food served in the home. This is not to say, however, that the students do not make their own food choices. Instead, when the students do make their own food choices, they view these as individual choices, and the food is sourced not in bulk or as component ingredients, but as episodic meals. In these situations, they obtain food from corner stores, convenience stores, and local fast food restaurants. The lack of grocery stores is not perceived as a pressing health factor from this vantage point. Instead, the students voiced concern over the lack of healthy and affordable alternatives at the corner stores and fast food restaurants.
Additionally, a number of unanticipated themes appeared. Most notably, the students frequently cited environmental pollution, litter, and lack of cleanliness—both in school and in their neighborhoods—as one of the primary factors in the “unhealthy” category. This “pollution/litter” category included photographs of riverbeds with litter, a grill at a public park filled with garbage, a neighborhood street with a dead animal and litter, the outdoor courtyard at school with litter blowing around in it, and a classroom within the school full of debris, dust, and what looked like old craft supplies on the floor, covered in dirt. Additionally, this theme was defined from the “healthy” side with a photograph of a factory that a student coded as such because he thought its chimneys did not emit any polluting vapors. Students also coded numerous photographs of trees in this healthy environmental category, noting that trees cleaned the air and promoted better health.
During the interviews and focus groups, there were discussions of both physical and social/mental health that related to this theme. The physical health discussions centered on the problem of asthma, whereas the social/mental health discussions engaged the issues of economic disinvestment in the community, lack of inviting public spaces (both within and outside the school), and a frustration over both inadequate sanitation services alongside an awareness of the community members’ responsibility for the litter. Students suggested addressing the problems with additional signage indicating the penalties for littering and a grassroots campaign utilizing peer pressure to prevent residents from littering. They also suggested commending the factories that they perceived to be free from the vice of polluting.

Research results regarding food were mixed. Some of the original hypotheses regarding concern over the frequent consumption of fast food, as well as its prevalence, were borne out by the data. Many of the pictures in this category focused on McDonald’s establishments and the food purchased there. The other photographs included pictures of Wendy’s, Long John Silver’s, Subway, and a local fried chicken establishment. The students did not, however, speak about McDonald’s and its counterparts in entirely negative ways. For example, one student coded a
picture of a McDonald’s meal as both healthy and unhealthy, explaining that McDonald’s food provides a quick and affordable way to get energy, and if a person is really hungry, then eating McDonald’s can be seen as healthy for them. This contextualization of the concept of “healthy” recurred among the interviews and during the focus groups. The students often noted that a healthy behavior for some might not be healthy for others, and vice versa. Students also expressed a common wisdom regarding moderation, alongside a very strong theme of personal responsibility. They repeatedly asserted that the individual should be responsible for their own choices, and that each person’s health was their own responsibility.

The students perceived themselves as responsible individuals, and this theme, articulated repeatedly during interviews, appeared in the photographs as well. There were many pictures of “healthy” items and behaviors, including multiple pictures of drinking water (from water bottles and from water fountains); athletic activity such as basketball, softball, track, and the informal outdoor play of children; as well as a photograph of a framed picture of friends. This high level of personal responsibility likely accounts for the mixed results in response to the question: “Is Dallas a healthy place to live?” For some students, the notion of personal responsibility led to a critical stance of others, and a focus on unhealthy aspects of Dallas. For other students, the notion of personal responsibility was an expression of personal behaviors, with the subsequent photographs weighted toward the healthy category.
Both groups, however, recognized the importance of social relationships to health choices. For example, the student who submitted the photograph of a framed picture of her friends explained that it represented health because friends serve as an important emotional support, as well as an influence on health behaviors. This photograph garnered much support during the focus groups, as students talked about the influence of social relationships on personal choices.

A robust body of sociological and anthropological research defines these social pathways related to food access, preparation, and consumption, as “foodways.” Students described a few prominent social foodways, nearly all of which related to McDonald’s. One was the family routine of getting dinner at McDonald’s. Many interviews described this routine and the focus groups recognized it as a common phenomenon. Another was a friend-related theme of driving to McDonalds, ordering specific items, and combining those items into one sandwich. This creative appropriation of McDonald’s offerings proved a common Friday routine described by one student in her interview, with the sandwich creation enthusiastically recognized and described (with laughs and cheers) during the focus groups. The sandwich, known as a “McChickable,” involved placing a McChicken (with or without the bun, according to individual preference) between the two hamburger patties of a McDouble. Both of these items appear on the McDonald’s Dollar Menu. The creation is affordable, convenient, creative, and humorous. When considering policy recommendations, the research team noted this enjoyment of creatively and socially tailoring food to personal taste as an asset that might be encouraged, albeit with healthier component food element.
Focus Group 1

The final two focus groups yielded further insights that proved influential in developing policy recommendations. The first focus group was more structured than the second. During the first, students went around one by one and showed each other their top three pictures, explaining why they selected each one. Before this, the students had been asked to keep their pictures and ideas to themselves, so as not to influence each other and sway the results. Once students shared the pictures, they then identified a picture taken by someone else that they would add to their own list: “Which picture do you wish you’d taken?” Finally, the students were asked to identify an adult in their own life whose health decisions influenced their own. Throughout each phase, students were encouraged to comment and reflect with each other.

During the first focus group, a main research goal was to better understand the sources of health knowledge, and motivating factors in health behavior. The students discussed two major sources of health knowledge: advertizing, and school health class. Multiple students had taken pictures of the sandwich topping options at Subway or similar restaurants. Numerous students cited sub sandwiches as a healthy factor in their interviews. During the first focus group, the students explained that the ingredients were fresh and that they knew it was healthy because they had seen the advertisements with Jared, the man who lost a substantial amount of weight by eating particular Subway
sandwiches. The ability to choose toppings and dressings also reinforced the personal choice and responsibility theme that was prominent throughout each research phase.

The second factor in health knowledge was the health class offered in school. This source of health knowledge partly accounts for the theme of water consumption as a healthy behavior, but advertising bolstered that theme as well. Student spoke not simply about drinking water, but more specifically about Smart Water, as well as the benefits of bottled water. Bottled water is pure. It comes from uncontaminated sources. The litter-strewn riverbeds that showed up in the photographs are the opposite of such pure water sources. Further, they cited health class as a place where they learned about the way environmental pollution affects health, and the photographs of water, litter, and trees show the influence of their education about drinking water and environmental stewardship.

Finally, in health class students gained a basic knowledge of the food pyramid and the importance of exercise. Here, the discussion began to focus on the motivations for health behaviors. The students discussed a shift from active play to sedentary relaxation that happens between childhood and adolescence. They discussed how it was normal for children to ride bicycles and play basketball, but viewed those activities largely as children’s activities. Once students hit adolescence, they tended to stay inside. Indeed, the terms “sit” and “sitting” emerged as themes both in the interviews and the focus groups. Students took a critical stance toward those who would “just sit around” instead of participating in some aerobic physical activity.
What could motivate students to change their behavior? The first answers to this question were: being forced to take insulin for diabetes or the news that they had developed a disease such as gout. The students recognized that these were extreme health conditions but insisted that students, themselves included, were usually stubbornly set in their ways. They did not see change happening in circumstances any less dire than illness that threatened life or limb. They noted that motivating health change in students proves especially hard because many of them perceived their health as decently good and they noted that diabetes and gout occurred most frequently among adults. They would address those concerns in the future, but right now, “we feel invincible because we are young,” a student explained.

Focus Group 2

Having reviewed the data from the interviews and the focus groups, the research team developed a docket of potential policy recommendations. The final focus group sought to garner student opinion about the potential for each of the options to succeed. This meeting narrowed down the policy recommendations to those with the greatest potential for success in the community. One major idea eliminated during discussion was a proposal for a public-private initiative to address the litter in the community and the school. The students indicated the difficulty of building a coalition committed to long-term change on this factor, with students unlikely to participate in such a coalition. They recognized the problem as substantial, but did not think that such an initiative would induce lasting change.

The second topic covered was access to healthy foods. Would adding a grocery store serve as a viable solution? The students pointed out that most people thought grocery stores were more expensive than the corner stores they typically patronized and doubted that a grocery store would succeed. When asked if people perceived Wal-Mart’s prices as affordable, the students expressed much more
enthusiasm. Despite some reservations about its affect on some local small businesses, they agreed that the community would embrace a Wal-Mart, due to the perception of low prices as well as the convenience of taking care of multiple errands in one store. They noted, however, that even this addition was unlikely to change eating habits, and that set patterns would not be transformed simply by the availability of more fresh food.

The research team was prepared for this. The final topic we discussed was the addition of a culinary arts class in school. We proposed a concept of offering a culinary arts class in partnership with a school that awarded professional credentials, which students could pursue as a vocational pathway to a career in culinary arts or simply a means to develop more creativity and skill at cooking. The students showed great enthusiasm about this proposal, saying that it would be a very popular class with the students. Not only would it allow them to learn skills and be creative, but it would also equip them to enter the workforce, either part-time as working students, or full time in careers.

POLICY RECOMMENDATIONS

The results of our research show that food deserts cannot be adequately addressed by simply adding grocery stores to neighborhoods that have, for decades, been without them. The patterns of food behavior have developed over time, and these foodways must be addressed in conjunction with the food environment. Based on our research, we recommend that improved fresh food access, in tandem with empowerment through culinary arts programs and sustained exposure to an engaging health initiative is the best approach to addressing the Dallas food deserts.
Corner stores remain a popular source for groceries in South Dallas partly due to the convenience of their location, and partly because of a perception that it costs less to purchase food in these stores compared to chain grocery stores. The students clearly expressed their doubts about overcoming this perception in the community at large. This persistent belief leads to the proposal of introducing a store that residents perceive as offering the lowest prices: Wal-Mart. Wal-Mart Stores, Inc. intends to open twelve additional stores in the Dallas metroplex, with six sites undetermined at the time of this writing. South Dallas serves as an important option for a new Wal-Mart store. The addition of a Wal-Mart store with a comprehensive grocery offering would not only bring health benefits to the community, but would add economic development by creating approximately 300 new jobs and perhaps greater spending by increasing spending traffic from nearby neighborhoods like Oak Cliff.
Exposure

School, home, and media all influence the students' health behaviors. To comprehensively develop more healthy food behaviors, the “Dallas Healthy Student Initiative” pursues a three-pronged approach in a coordinated health campaign.

The initiative would begin with an all-school health fair, featuring free fitness assessment kiosks with a variety of measurement tools: BMI measurement, use of calipers to measure body fat recording waist-to-hip ratio, and the option to participate in minor finger-prick blood work. Students will record their food consumption for the day before blood work in order to show them the real-time effects of sugar-consumption on their blood sugar across family and peer groups. Careful planning might allow various Dallas professional athletes to come and talk to students and their family members about making healthier choices. Doctors and healthcare professionals would also talk to students and parents about healthy choices, while providing expert answers to health questions.

The health fair also serves as the recruitment site for participants in phase two of DHSI. Community volunteers will participate in a series of online webisodes (web episodes) documenting the health journey of local role models and leaders. The webisodes intend to help students recognize the long-term risks and consequences of negative health behaviors, especially obesity, heart disease, and diabetes. The goal is to recruit students in film and media arts at Meadows School of the Arts (SMU) to film these webisodes in a reality-TV format and post them on YouTube and as free podcasts on iTunes to facilitate the widest access to high school students. The local schools could also play these in video loops on TVs in school lunchrooms.

Alongside these webisodes, graduate students at the Temerlin Advertising Institute (SMU) would develop a variety of ads promoting healthy choices. Prominent athletes would encourage students to “Add some color!” by including fruits and vegetables to meals, or remind them that “Your body is like a car” and so needs constant maintenance. Research indicates that effecting behavioral change
through awareness requires both some shock value, which will come out in the webisodes, as well as positive reinforcement, via the advertisements.

DHSI will culminate in a Health Week during the Spring semester. During the Health Week, the school will implement a ‘switch and grab’ campaign for student breakfasts. Student interviews indicated that popular breakfast choices include chips and sodas from convenience stores near their high school. Health ambassadors stationed at the school entrance will offer to exchange these unhealthy food choices for a piece of fruit and water. During the week, student ambassadors will captain daily health-awareness initiatives. At the end of Health Week, a school wide assembly will air a final webisode documentary. Several stars from the webisodes will address the students to discuss their experience and answer questions.

**Empowerment**

The final policy recommendation, and potentially most impactful on lasting behavior changes, proposes to pilot a culinary arts program to the curriculum at Lincoln High School. Students who complete four courses during the first two years of high school will receive a basic certification. Basic certification helps students who might drop out of school by the end of tenth grade by furnishing them with a career-skills certificate that would help them to secure employment in the food services industry. However, an additional four courses over the Junior and Senior years yields an advanced certification, which will hopefully serve as an incentive for students to graduate from high school.

The freshman two-semester course introduces students to the culinary arts, teaching comprehensive cooking skills. Subsequent courses will prepare students for work and entrepreneurship in the food industry. Course development will likely emerge under supervision of the district, following the Achieve Texas career pathway initiative. This initiative stipulates that every Dallas, Texas high school offers a variety of specialized programs of study within sixteen broad career pathways.
The implementation of the career pathways began in 2010, and the recommendations from this research come at an opportune time. Our goal is to work with the district to implement the Culinary Arts program of study in Dallas high school located in food deserts. We aim to pilot these recommendations in Lincoln High School during the 2011-2012 school year, with the added support of the Dallas Healthy Student Initiative awareness campaign.

CONCLUSION

The food deserts in South and West Dallas are products of a decades-long history of economic, educational, and social marginalization. The current lack of access to fresh foods is directly related to higher incidences of obesity, heart disease, and diabetes. While adding grocery stores, or superstores like Wal-Mart, provide one solution to addressing the health inequalities related to the food environment, addressing the built environment alone will not be adequate. A more holistic approach, which takes into account the existing social and cultural foodways, must endeavor to influence personal and social food habits and perceptions. Therefore, in addition to recommending that a Wal-Mart be located in South Dallas, the Ethics Design Team recommends launching the Dallas Healthy Students Initiative, a campaign that aims to expose students and their families to sound health information in an engaging and impactful manner. Furthermore, the EDT recommends supporting this campaign by piloting a Culinary Arts and Business Certificate program in Lincoln High School, located in South Dallas. The EDT believes that this elective educational cluster will promote and strengthen a health-oriented cooking culture amongst the students, and that this will in turn influence the cooking and food consumption culture outside the community— in families, churches, and restaurants. Additionally, this educational program will enable students to develop skills that might transfer to vocational pursuits, or lay the foundation for successful performance in higher education courses that focus on
business management. If the three recommendations are pursued in conjunction, the EDT believes that both the food environment and the foodways in the South and West Dallas food deserts will be positioned to develop in a more healthy and sustainable manner.
NOTES

4 Ibid., 4.
5 The Public Effects of Food Deserts, 12-13.
6 Ibid., 13.
7 Ibid., 14-15.
8 Ibid., 13.
9 Beaulac, et al., 4.
10 The Public Effects of Food Deserts, 42.
11 Ibid., 23.
12 “Access to Affordable and Nutritious Foods,” 2.
13 Ibid., 45-67.
15 Ibid., 1170-1.
16 The Public Effects of Food Deserts, 23.
18 Ibid., 382.
19 Ibid.
20 Ibid.
22 Ibid., 24.
23 Ibid., 27-28.
24 Ibid., 30.
25 Ibid.