



Shining a Light on the Valley of Heart's Delight

*Taking a Look at Access to Healthy Foods in Santa Clara County's
Communities of Color and Low-Income Communities*





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Please note: Food Empowerment Project does not advocate the term "Hispanic," and when used in this report, it is always within a direct quote. Also, when we use the terms "lower-income and higher-income" to describe areas of Santa Clara County, we are not referring solely to income, but to levels of education and ethnicity as well (see Appendix A).

Introduction

The Silicon Valley was once considered the Valley of Heart's Delight due to all of its plants, flowers, and orchards. In fact, it was the largest fruit production and packing region in the world. The history of our beautiful valley is one of fresh fruit and bounty, and yet today, many areas in San José lack access to these foods.

With all of the wealth in the Silicon Valley the fact that certain communities do not have access to fruits, vegetables, and other healthy food alternatives is an injustice that should not be accepted.

We are not alone when it comes to issues of food deserts (areas with limited access to affordable, healthy food due to geographic location) and food insecurity (limited or uncertain access to enough food to live an active and healthy life due to a lack of monetary funds). According to the United States Department of Agriculture (USDA) in 2008, "About one-third of food-insecure households (6.7 million households or 5.7 % of all U.S. households) had very low food security...Rates of food insecurity were substantially higher than the national average for households with incomes near or below the Federal poverty line, households with children headed by single women or single men, and Black and Hispanic households."¹

When you consider the many ailments that arise as a result of diets lacking in fruits and vegetables—including type-2 diabetes, heart disease, cancer, and cardiovascular disease—it is imperative to address this issue now with prevention and not later with poor health and costly medical care. There is no question that eating a diet with more fruits and vegetables is good for your health, and based on the results of this survey, there is no question that certain areas of San José are lacking healthy food options. Income should not be a factor when choosing to eat healthy foods.

Who We Are

Founded in 2006, the Food Empowerment Project (F.E.P.) seeks to create a more just and sustainable world by recognizing the power of one's food choices. We encourage healthy food choices that reflect a more compassionate society by spotlighting the abuse of animals on farms, the depletion of natural resources, unfair working conditions for produce workers, and the unavailability of healthy foods in low-income areas.

F.E.P is a national non-profit located in San José, California, in Santa Clara County (also known as the Silicon Valley), one of the wealthiest counties in the country.² At present, F.E.P. is an all-volunteer organization.

The findings set forth in this report are intended to give communities and policymakers insight into what is taking place right here in Santa Clara County. It also gives us a good starting point in order to work on this issue with our local communities because we know that people's health and the environment can be negatively affected by not only eating too many animal products, but also eating foods tainted with agricultural chemicals, which have a serious impact on the workers who pick our food.

F.E.P.'s mission is to encourage people to make the most ethical and just choices when eating, which in the end is healthier for themselves and the planet. We were compelled to learn why it is that eating healthier in many cities in the United States seems to not be a right, but a privilege. F.E.P. is committed to addressing this inequity by using accurate data and speaking with members of the impacted communities to help determine the best way to ensure change because those living in such communities are familiar with the status and needs of their own neighborhoods.

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The Issues

Environmental Justice/Environmental Racism

In 1991, the First National People of Color Environmental Leadership Summit drafted and adopted 17 principles of environmental justice. (To see the full set of principles go to: <http://www.ejnet.org/ej/principles.html>.) In essence, environmental justice encompasses where “we live, work and play, go to school (and sometimes pray).”

Environmental racism includes both the intended and unintended consequences of environmental rules and regulations that are often lax,

selectively, or sometimes not enforced at all and directly impact people of color.

The lack of healthy foods in communities of color and low-income communities is something that the Food Empowerment Project views as a form of environmental racism. Simple terms such as *food deserts* and *food security* issues should not mask the huge problem that is a reality for many of those living in the United States.

The Health of Communities of Color in California

The following facts were published in a report by the California Legislature’s Legislative Task Force on Diabetes & Obesity³ in January of 2009:

- “African Americans are 1.8 times more likely to have diabetes as non-Hispanic whites. It is estimated that 2.5 million of all Hispanic/Latino Americans aged 20 years or older have diabetes. Mexican Americans are 1.7 times more likely to have diabetes as non-Hispanic whites.”
- “Approximately 1.8 million Californians (7 percent) have diabetes. ...prevalence of diabetes is higher among Latinos, African Americans and American Indians compared to Caucasians. Almost 37 percent of Latinos with diabetes are diagnosed before the age of 40. This compares to only 20.4 percent of their Caucasian counterparts.”
- “... low-income Californians also have a much higher prevalence of diabetes.”
- “Mortality rates associated with obesity and diabetes are also higher within minority populations. Of all racial and ethnic groups, Native Americans and Alaskan Natives die at the earliest age due to diabetes, 68.2 years. This is 6.4 years younger than Caucasians. African Americans die from diabetes at a rate of 97.6 per 100,000, much higher than for any other racial/ethnic group.”

A study in *Health Affairs* reported that, “Low-income people and people of color have been particularly affected; they now suffer from disproportionately high rates of obesity, overweight [sic], diabetes, and heart disease.”⁴

Diabetes

In 2007, Santa Clara County's estimated rate of adults diagnosed with diabetes was 7.2%⁵ and by 2009 the rate had risen to 8%⁶.

The National Diabetes Information Clearinghouse (NDIC) has shown that 90 to 95% of people with diabetes suffer from type-2, the most common form, which is typically a late onset disease caused by an unhealthy diet and lack of physical activity. About 80% of people with diabetes are overweight.⁷ There is a high risk of cardiovascular disease in adults with diabetes, and the NDIC notes that 65% of those with diabetes die from heart disease or stroke.⁸ Because an important tool in managing diabetes is eating healthy foods, the health of those who do not have access to these foods is seriously impacted.

published in *The Lancet* noted, "In the USA, for example, as food has become cheaper during the past several decades, especially foods high in fat and sugar, obesity rates have risen. And obesity rates among the poor, who are more likely to depend on high-fat, high-sugar foods for their meals, are substantially higher than the rates seen in higher income groups."⁹

It is clear that healthy diets can be expensive, and Adam Drewnoski, director of the Center for Public Health Nutrition at the University of Washington in Seattle, has said, "Obesity is a low-income problem, yet we offer middle class solutions. We say you need to eat more fresh fruits and vegetables and need to exercise more. Well, if you live in the inner city you aren't going to suddenly start eating mangoes and playing tennis."¹⁰

He also noted that people often think those in low-income communities have plenty of time on their hands, but many are "time poor" as well as cash poor."¹¹

What is often not taken into consideration is that many of those living in low-income communities work long hours, have long commutes (sometimes using various modes of public transportation) and some even have more than one job. Therefore, many do not have the time to be able to travel long distances to find healthy options or even to cook meals.

Obesity

The Santa Clara County Board of Supervisors has taken an important first step in beginning to address the issue of obesity by banning fast food retailers in the unincorporated areas of Santa Clara County from giving away toys with their menu items if they fail to meet basic nutritional standards. Cheap food is certainly a culprit when it comes to the health issues facing many in the United States. In 2004, a paper

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The Importance of Fruits and Vegetables

When you consider that a diet high in fruits and vegetables decreases the risk of obesity, diabetes, and some types of cancer, it is no wonder that communities of color and low-income communities who do not have access to such foods are in danger of acquiring diseases that can easily be prevented. According to the Centers for Disease Control and Prevention (CDC)¹²:

- Healthy diets rich in fruits and vegetables may reduce the risk of cancer and other chronic diseases.
- Fruits and vegetables also provide essential vitamins and minerals, fiber, and other substances that are important for good health.
- Most fruits and vegetables are naturally low in fat and calories and are filling.

So why are communities of color and low-income communities at a distinct disadvantage when it comes to these foods, and how is that disadvantage affecting the people in these communities?

Why We Conducted the Study

A report released in January of 2007 by the California Center for Public Health Advocacy found that Santa Clara County had more than four times as many fast-food restaurants and convenience stores as supermarkets and produce vendors.¹³ Similar studies have concluded that communities of color and low-income communities are at a disadvantage when it comes to having access to the same healthy foods available in higher-income areas. We wanted to know if this could really be taking place in our backyard.

We knew that collecting our own data would not only give us a more personal perspective of the various communities, but would also provide results that we could use and share with neighborhood and community activists in order to discuss with policymakers at all levels of government the need to ensure that everyone has access to healthy foods.

We conducted this survey to answer the following research questions:

1. Does access to fruits and vegetables differ for those in higher-income areas versus those in lower-income areas within Santa Clara County? If so, how significantly?
2. What are the differences in types of grocery stores (e.g., supermarkets vs. liquor stores) available to those living in higher-income and lower-income areas within Santa Clara County?
3. How does access to healthy food products (e.g., fruit, vegetables, meat and dairy alternatives) differ for those living in higher-income and lower-income areas within Santa Clara County?
4. How do other factors, including quality of produce, cleanliness of the stores, promotion of alcohol and tobacco products, etc., differ between higher-income and lower-income areas?

Survey Methods

To better understand the relationships between income and health, and assess the disparity of access to healthy foods, the Food Empowerment Project surveyed food establishments in Santa Clara County, California. In addition to being geographically accessible to F.E.P.'s staff of volunteer surveyors, Santa Clara County is an excellent location for such research given the diversity of the population. To contrast the differences between relatively higher-income and lower-income populations within the county, F.E.P. selected a small number of census tracts based on a combination of education, ethnicity, and poverty levels.

The census tracts that were surveyed were located in eight of Santa Clara County's 15 independently incorporated cities; these tracts represented the areas that had the most advantages and least advantages based on income, education, and ethnicity. Those that represent "lower-income" areas (as they are described during the remainder of this report) include households of individuals who, on average, have significantly fewer years of education*, are more likely to live below the federal poverty level, and are more likely to be ethnic minorities (non-white individuals) compared to the county as a whole. By contrast, the census tracts representing higher-income areas have populations that have significantly more years of education, are less likely to live below the federal poverty level, and are predominately white compared to the rest of Santa Clara County. For definitions and a complete list of the census tracts, as well as the ZIP codes of the locations included in the F.E.P. survey sample, please see Appendix A.

Using the ReferenceUSA® database of 14 million U.S. businesses, F.E.P. surveyed all food-related locations in the census tracts of interest. This database uses the North American Industry Classification System (NAICS) to categorize the retail outlets that sell food. Our census tracts included: supermarkets, convenience stores, liquor stores, meat markets, and fruit/vegetable markets. The survey did not include restau-

rants or other locations with a food service emphasis. The NAICS classification system aggregates supermarkets with small corner grocery stores. However, F.E.P. volunteers separated full-service supermarkets from small grocery stores (see Appendix B). Volunteers were able to determine that 15 of the locations from the ReferenceUSA® database were closed and these locations were therefore omitted from the sample (as well as others that closed following data collection), along with 11 duplicate records.

Additionally, two locations refused to cooperate with the F.E.P. survey. F.E.P. is also aware that some food locations have recently opened in the study areas, but an accurate count of new locations is not available.

The higher-income areas that were surveyed in Santa Clara County included one or more census tracts within the cities of:

- Campbell
- Los Altos
- Los Gatos
- Morgan Hill
- Palo Alto
- San José
- Santa Clara
- Saratoga

All of the lower-income areas were in census tracts within San José.

Cities in Santa Clara County that were not included in the survey are Cupertino, Gilroy, Los Altos Hills, Milpitas, Monte Soreno, Mountain View, and Sunnyvale.

* Education refers to the percent of population with a high school diploma or more education. In the higher income areas people are 30% more likely to fit this description (vs. the average for all of Santa Clara County), while in the

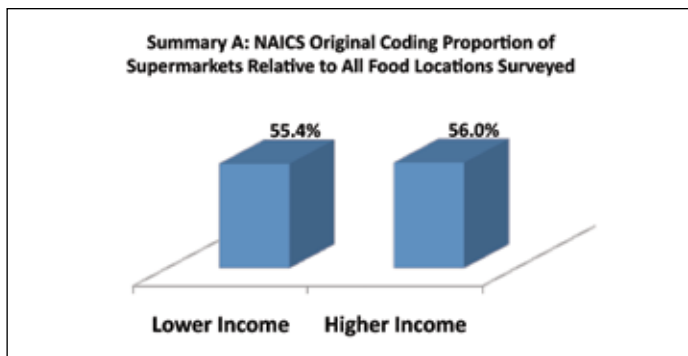
lower income areas people are 30% less likely to have this much education (vs. the county average).

Survey Results

I. Supermarkets vs. Small Grocery Stores

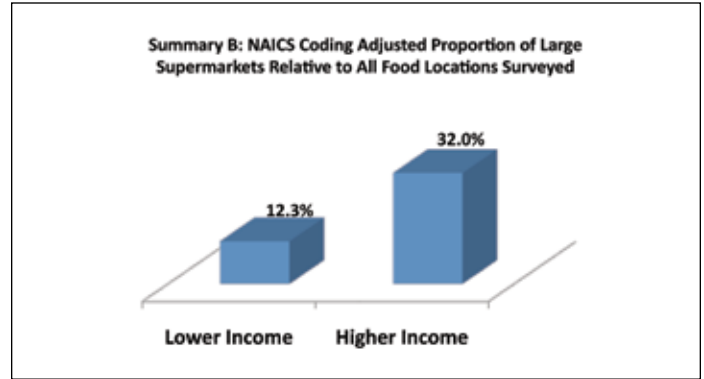
Our survey found that there are twice as many large supermarkets in higher-income areas than in lower-income communities, while the two have roughly the same number of convenience stores. On a per-capita basis, the higher-income areas have 2.4 times as many large supermarkets compared to the lower-income areas. Additionally, the lower-income areas have nearly twice as many liquor stores and 50% more meat markets than the higher-income areas.

Using our survey data (see Appendix B), the graphs below show the lack of transparency when comparing the proportion of supermarkets in the lower- and higher-income areas. As seen in the graph of Summary A, when it comes to locations classified as supermarkets by the US government's North American Industry Classification System, the two areas have a comparable proportion relative to all food locations surveyed. However, when we look at a more granular and realistic picture of supermarkets based on size (manually coded as large or small by F.E.P. volunteers) as seen in the graph of Summary B, proportionally the higher-income areas had more than twice the number of *large* supermarkets. Additionally, while large supermarkets represent 57.1% of all supermarket-classified locations in the higher-income areas, large supermarkets represent only 22.2% of the supermarkets surveyed in lower-income areas. The disparity is significant and shows that those living in lower-income areas are relying on small corner markets while those in higher-income areas have access to large grocery stores. Clearly, the current NAICS coding for supermarkets obfuscates the differences between small and large grocery stores with widely varying selections of fruits and vegetables.



Lower Income has 36 supermarkets out of a total of 65 food locations surveyed, representing 55.4%

Higher Income has 28 supermarkets out of a total of 50 food locations, representing 56.0%



Lower Income has 8 *large* supermarkets out of a total of 65 food locations surveyed, representing 12.3%

Higher Income has 16 *large* supermarkets out of a total of 50 food locations, representing 32.0%

II. Produce

To assess the availability of produce in a consistent manner, F.E.P. surveyed a standard selection of fruits and vegetables in each census tract, including a variety of items such as apples, blueberries, chayotes, grapes, guava, oranges, avocados, bell peppers, broccoli, collard greens, kale, nopales, spinach, and squash. For a complete list of produce items we surveyed, please refer to the survey instrument in Appendix D.

All types of fruits and vegetables covered by the survey are more commonly available in higher-income areas, except (non-organic) canned fruits and vegetables, which are equally available in both higher- and lower-income neighborhoods. Those living in the higher-income areas have significantly more access to fresh, frozen, and organic produce. The following table summarizes the availability of fruits and vegetables in the two types of areas surveyed.

Percentage of Locations with Produce
(averages for each category)

	Lower Income Areas (N=65)	Higher Income Areas (N=50)
Fresh Fruits/Non-Organic	17.3%	33.7%
Fresh Fruits/Organic	0.1%	8.3%
Fresh Vegetables/Non-Organic	16.1%	32.5%
Fresh Vegetables/Organic	0.0%	11.5%
Frozen Fruits/Non-Organic	1.2%	17.2%
Frozen Fruits/Organic	0.0%	6.2%
Frozen Vegetables/Non-Organic	3.1%	18.1%
Frozen Vegetables/Organic	0.1%	6.9%
Canned Fruits/Non-Organic	22.6%	23.3%
Canned Fruits/Organic	0.0%	2.7%
Canned Vegetables/Non-Organic	28.3%	30.4%
Canned Vegetables/Organic	0.5%	3.9%

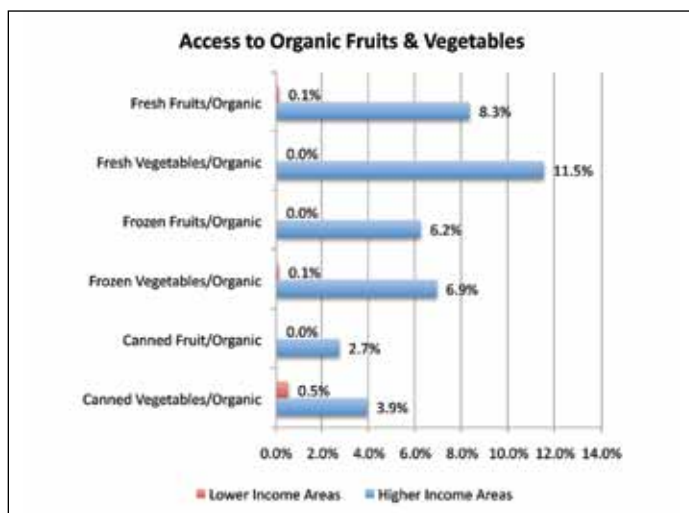
On average, higher-income areas have twice as many locations with fresh fruits and vegetables compared to the lower-income areas.

The disparity for frozen produce is even higher, with higher-income areas having 14 times more locations with frozen fruit and six times more locations with frozen vegetables. Access to canned produce is essentially the same for both types of communities.

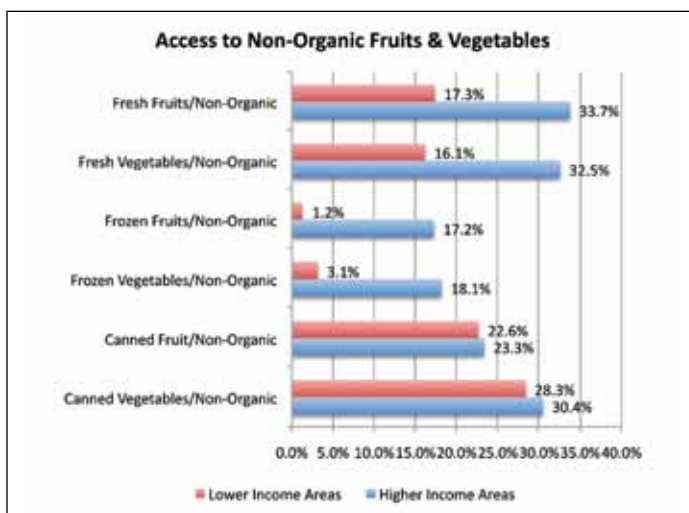
In addition to being generally less available in lower-income areas, the *variety* of produce is also limited in these locations relative to locations in higher-income areas.

Organic Produce

We found that access to organic fruits and vegetables is almost non-existent in the low-income areas and represents the greatest disparity between the two types of areas surveyed (see Graph A). Non-organic fruits and vegetables, meanwhile, were found to be more accessible to both groups, though even here the disparity is significant (see Graph B).



Graph A: Low-income communities have virtually no access to organic produce.



Graph B: Both income groups have more access to non-organic produce, though the disparity remains significant.

Cost

Although we found it difficult to determine the cost differences between the two areas, one of the most striking differences was that in liquor/convenience stores, much of the fresh and canned produce was not marked—meaning there were no clear prices. In other words, the customer would be at the mercy of the person behind the counter, who could determine in an instant the cost of a particular item. In our opinion this is holding the customer hostage to the whims of the store employee. It was definitely a good sign to see fresh produce in these locations; at a majority of the locations, the person behind the counter seemed to make up the price on the spot as no price was listed.

Quality

F.E.P. volunteers also assessed the quality (i.e., freshness) of the produce selection (if applicable) at all locations with the possible grades being excellent, good, fair, and poor. Consistent with the disparities found when it comes to produce availability, quality also differed significantly between the two types of areas surveyed.

The quality of produce in higher-income areas was rated “excellent” or “good” in a majority of locations (52%), compared with less than a third (30%) of locations in the lower-income areas. Seven in 10 locations in lower-income areas received a quality-of-produce rating of “fair” (36%) or “poor” (34%).

The survey also included the question, “Does the store provide a clean and sanitary environment for fresh fruits and veggies?” The answer was “yes” in just over a third of locations in lower-income areas (35%), which is slightly more than half of the “yes” responses for locations in higher-income areas (61%). Therefore, in addition to having less access to a lower-quality selection of produce, individuals living in these lower-income areas must also shop in stores that are less sanitary. When it comes to access to healthy foods, the inequities in these areas are many.

III. Meat and Dairy Alternatives

The lack of meat and dairy alternatives (such as meatless burgers, tofu, non-dairy milk, and non-dairy ice cream) in communities of color and lower-income communities represents a kind of injustice that many do not consider; it limits the choices for the consumer. (For a complete list of the alternatives included in our survey, please refer to Appendix D.)

There is overwhelming evidence that a diet high in animal products increases the chance of serious health problems and that “vegetarians have a lower risk of obesity, coronary heart disease (which causes heart attack), high blood pressure, diabetes mellitus and some forms of cancer.”¹⁴

Lactose intolerance is an issue that also needs to be addressed. According to the U.S. Department of Health and Human Services, “The pattern of primary lactose intolerance appears to have a genetic component, and specific populations show high levels of intolerance, including approximately: 95 percent of Asians, 60 percent to 80 percent of African Americans and Ashkenazi Jews, 80 percent to 100 percent of American Indians, and 50 percent to 80 percent of Hispanics. Lactose intolerance is least common among people of northern European origin, who have a lactose intolerance prevalence of only about 2 percent.”¹⁵

When you consider that many people of color are lactose intolerant, the lack of dairy alternatives has serious health implications, including:

- abdominal bloating
- gas
- diarrhea
- nausea

Although not the primary focus of F.E.P.’s survey, the availability of meat and dairy alternative products is a relevant component of access to healthy foods. Here again we see a significant disparity in access between the higher-income and lower-income areas. Specifically, while meat alternatives were available in more than a fifth (22%) of locations in higher-income areas, they were available in only 2% of locations in lower-income areas. Similarly, 18% of locations in higher-income areas had vegan meat alternative options, versus less than 1% of locations in lower-income areas.

Dairy alternatives are an essential health food, in part because of the high incidence of lactose intolerance among ethnic minorities. However, these alternatives, such as soy milk and rice milk, are available in only 3% of locations in lower-income areas (which have proportionally much larger populations of ethnic minorities), compared with 23% of locations in the higher-income areas. And while only 1% of locations in lower-income areas had vegan dairy alternatives, 21% of locations in higher-income areas had vegan options.

IV. Other Issues

In addition to assessing the availability of produce and meat and dairy alternatives, the F.E.P. survey also gauged the availability of other products related to healthy foods and lifestyles (e.g., dried fruits and legumes, alcohol, tobacco). The differences between higher-income and lower-income areas were significant, but varied. The locations in higher-income areas were more likely to carry dried fruit in bags or bulk and more likely to carry all types of alcohol (liquor, beer, and wine).

However, the locations in lower-income areas were more likely to carry dried beans in bags or in bulk and also slightly more likely to carry tobacco products. The following table breaks down the specific differences for this section of survey questions.

Survey Question	Lower Income Areas (N=65)	Higher Income Areas (N=50)
Does the store carry dried fruit in bags or in bulk?	37.5%	56.3%
Does the store carry dried beans in bags or in bulk?	69.8%	43.5%
Does the store carry liquor?	59.4%	74.0%
Does the store carry beer?	72.3%	90.0%
Does the store carry wine?	58.7%	84.0%
Does the store carry tobacco products?	76.9%	73.5%

In addition to being generally less available in lower-income areas, the variety of produce is also limited in these locations relative to locations in higher-income areas.

Additional Findings

Finally, the F.E.P. survey addressed other questions relating to healthy foods, including placement of products, signage, acceptance of food stamps, etc. These items are summarized in the following table. Of particular note, in higher-income areas only one of 12 liquor stores that carried food items accepted food stamps, while in the lower-income areas about half (54%) of the liquor stores accepted food stamps.

Note that food is generally more likely to be available at liquor stores in lower-income areas, where such stores are a major source of food due to the lack of other options

Twenty-eight percent of locations in higher-income areas had a salad bar and/or prepared salads, compared with only 3% of locations in lower-income areas.

Survey Question	Lower Income Areas (N=65)	Higher Income Areas (N=50)
Does the store provide an in-store salad bar and/or make available or prepared salads?	3.1%	28.0%
Are fresh fruits and veggies promoted near the front of the store or on aisle “end caps”?	9.4%	44.7%

Survey Question	Lower Income Areas (N=65)	Higher Income Areas (N=50)
Are meat/dairy alternatives promoted near the front of the store or on aisle “end caps”?	3.1%	10.0%
Does the store have outside signage promoting alcohol and tobacco products?	46.8%	35.4%
Does the store have a lot of meat/dairy available, but relatively few fruits, veggies or alternatives?	13.8%	29.5%
Does the store have any information or carry literature about vegetarianism or veganism?	0.0%	4.3%
Does the store provide a clean and sanitary environment for fresh fruits and veggies?	35.2%	60.5%
Does the store have a separate organic or “health food” section?	0.0%	22.4%
Does the store have any information about lactose intolerance and/or alternatives to dairy?	0.0%	6.1%
Does the store accept food stamps?	64.0%	56.1%



Recommendations

There will never be a one-solution-fits-all approach to fixing a problem within a community with a diverse population and needs. But policymakers, corporations, and communities working together (with the understanding that those in the local communities should have the most say) have the ability to help solve the problem regarding access to healthy foods by using a variety of resources.

In order to successfully address the issue and make sure that everyone has access to healthy food, it will be necessary to work directly with the community; it would be a disservice to the individuals for anyone to tell them what they need without first seeking their input. Food Empowerment Project looks forward to working with community members, groups, and churches to survey residents in the areas most in need. Armed with community input, we will be better positioned to help them gain more convenient access to healthy foods.

As also mentioned in our “Next Steps” below, the following are some examples of the information we would like from community members:

- the types of food to which they lack access
- whether or not they have access to land to grow their own food
- if they are interested in classes to learn how to grow their own food
- where they currently do most of their shopping
- their level of interest in farmers’ markets
- if they would be interested in growing and selling produce

Recommendations, such as the following, will require working with policymakers in order to implement changes.

I. Land Availability

We encourage cities and the county to survey available land that could be converted into urban gardens in the areas that are most in need.

II. Require Prices

We encourage cities and counties to require that prices for food items be visible to the consumer as many of the convenience stores and markets included in our survey that sell food items did not have the prices listed. We understand that this might be more time consuming for small businesses, but this arbitrary method of determining the cost of food leaves customers open to being taken advantage of when they are trying to make healthy choices.

III. Clarify the Definition of Supermarket and Other Grocery Stores

Part of the problem is how the US government’s North American Industry Classification System (NAICS is the standard used by federal statistical agencies in classifying business establishments) categorizes retail outlets that sell food. According to the NAICS code¹⁶, small corner grocery stores are statistically lumped together with supermarkets, such as Safeway, Whole Foods Market, etc. In other words, a community with no supermarket and two corner grocery stores that offer liquor and food would be counted as having two retail food outlets, even though the food being offered may be extremely limited and consist mainly of junk food.

We encourage the federal government to clarify this definition so that statistics regarding community access to actual supermarkets and grocery stores are realistic and transparent and not skewed to include stores offering little to no healthy food options.

Next Steps

Food Empowerment Project's work will not end with this study. Our goal is to go back to the communities that experience the worst disparities (ideally three, and based on our survey, these would all be in San José) and survey members of the community in focus groups to gain a better understanding of their situation and needs. In doing so, we look forward to working with community groups and churches already located in those areas.

Examples of information we would like to determine: how do the members in these communities currently do their shopping, what helps them determine what they purchase, how often do they eat at home, what neighborhood options are available, and what would ensure that they eat healthier foods (backyard gardens, more produce in convenience stores, proper grocery stores, etc.)?

Throughout the community involvement there will be a cultural component and a sense of pride that is fostered when people realize they can indeed control aspects of their health and lives. Backyard gardens and self-sufficiency would be the ideal outcome to address the issue of a lack of access to healthy foods.

A later component would include information on healthy eating and cooking classes and an understanding of food justice issues.

W Policymakers, corporations, and communities working together have the ability to help solve the problem regarding access to healthy foods by using a variety of resources.

Discussion

Food Empowerment Project's focus is to prevent injustices against animals, workers, impacted communities, and the environment. We know that providing food choices that are free of animal products becomes even more important as consumers learn of the abuses in the animal agriculture industry and how animal-based foods impact the environment and their health. Billions of animals are raised for food on factory farms¹⁷ or taken from the oceans. Those in factory farms are confined in miserable conditions, with many being unable to even take a free step or turn around. It also seems that every few months there are reports providing information about the impact animal-based diets have on our environment, such as the large amount of water required for a "meat"-based diet¹⁸, as well as the pollution affecting our water and the air we breathe.¹⁹ Informed consumers simply want to make ethical choices and have access to healthier alternatives.

While we believe that everyone should be allowed to choose to eat more ethically, we cannot ignore the growing consensus that the chemicals used on conventionally grown fruits and vegetables can cause damage to human health, which is why organic produce needs to be more accessible in all areas.

The Environmental Working Group (EWG) found that people who ate five fruits and vegetables a day from a list they call the "dirty dozen" (conventionally grown celery, peaches, strawberries, apples, blueberries, nectarines, bell peppers, spinach, kale, cherries, potatoes, and imported grapes), "consume an average of 10 pesticides a day."²⁰ Organic produce therefore plays an important role when trying to eat healthy foods.

Our main interest, however, in determining if people in communities of color and low-income communities had organic options was actually due to the fact that most farm workers in the fields are exposed to and poisoned by the agricultural chemicals being used on conventional crops.²¹ Men, women, and children work in the fields in unsafe conditions on a daily basis in exchange for a salary below the national poverty level. We at the Food Empowerment Project believe everyone has the right to have access to organic options so that they do not contribute to the additional suffering of those who use agricultural chemicals to harvest our fruits and vegetables.

Programs to Consider

Creative programs have been launched in some areas of the country, including San José.

- La Mesa Verde²² is a new program in Santa Clara County where organic vegetable gardens are built at the homes of low-income families. We are excited about the work of La Mesa Verde in San José. Clearly, the ability for people to grow their own food is an important part of the solution to a lack of access to healthy foods.
- The Virtual Supermarket Project²³ is a program that started in Baltimore, Maryland, where residents can order their groceries on-line and pick them up from a local library. Although not everyone has access to the internet, residents can use the internet at the library. The program was funded by a grant from the federal stimulus package. It will be important to follow the progress of this program.
- To fight childhood obesity in low-income families, physicians at three health centers in Massachusetts are promoting “prescription produce” from local farmers’ markets by piloting a vegetable prescription project. To promote healthy eating, they are providing coupons worth \$1 a day for each member of a patient’s family with the goal of increasing consumption of fruits and vegetables. The doctors will track their patients in terms of their eating habits as well as monitor weight and body mass index. The non-profit *Ceiling and Visibility Unlimited* is sponsoring the clinics, while the Massachusetts Department of Agriculture and non-profit *Wholesome Wave* both provided funding to begin this pilot program.

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Appendices

Appendix A, B, C, D

Appendix A:

List of Census Tracts and ZIP Codes in Santa Clara County

Definitions

Lower Income Areas (on average, relative to the overall county population): 30% fewer Caucasians, 30% fewer high school graduates, and 30% more individuals falling below the poverty line.

Higher Income Areas (on average, relative to the overall county population): 30% more Caucasians, 30% more high school graduates, and 30% fewer individuals falling below the poverty line.

Lower Income Area Census Tracts	Higher Income Area Census Tracts
5009.01	5025.00
5012.00	5026.02
5015.02	5029.02
5017.00	5033.20
5019.00	5059.00
5031.10	5062.02
5031.13	5066.04
5032.08	5068.01
5032.13	5069.00
5032.14	5075.00
5032.17	5100.01
5033.06	5116.04
5034.01	5119.14
5034.02	5120.29
5035.04	5123.07
5036.02	
5037.03	
5040.02	
5041.02	

Lower Income Area ZIP Codes	Higher Income Area ZIP Codes
95110	94024
95111	94301
95112	94304
95113	95008
95116	95032
95122	95037
95126	95050
95127	95070
95148	95117
	95120
	95123
	95124
	95125
	95129
	95130
	95135

Appendix B:

Comparison of Location by Area Type Summaries

F.E.P. surveyed all food-related locations in the census tracts of interest. Store type, based on NAICS (North American Industry Classification System) classification, was appended from the ReferenceUSA® database of 14 million U.S. businesses. These included the following: supermarkets, convenience stores, liquor stores, meat markets, and fruit/vegetable markets. The survey did not include restaurants or other locations with a food service emphasis. The NAICS categorizes retail outlets that sell food and statistically lumps together supermarkets and

small grocery stores. When comparing the total number of supermarkets with the total number of food locations in each area, the results are very misleading. In Summary A, using NAICS original coding, it appears that the two areas have similar proportions regarding access to supermarkets (55.4% vs. 56%). Yet, when we look at a more realistic picture by comparing the number of *large* supermarkets in each area, the proportions show us a very different picture (12.3% vs. 32%).

Summary A: Location by Area - NAICS Original Coding

Lower Income has 36 supermarkets out of a total of 65 food locations surveyed, representing 55.4%

Higher Income has 28 supermarkets out of a total of 50 food locations, representing 56.0%

	Lower Income Areas	Higher Income Areas
Combined Population	131,667	136,136
Supermarkets - #	36	28
Convenience Stores - #	6	7
Liquor Stores - #	20	12
Meat Markets - #	3	2
Fruit/Vegetable Markets - #	0	1
People per supermarket	21,160	19,854
People per convenience store	21,945	19,448
People per liquor store	6,583	11,345
People per meat market	43,889	68,068
People per fruit/vegetable market	N/A	136,136

Summary B: Location by Area - NAICS Coding Adjusted for Supermarket Size

Lower Income has 8 *large* supermarkets out of a total of 65 food locations surveyed, representing 12.3%

Higher Income has 16 *large* supermarkets out of a total of 50 food locations, representing 32.0%

	Lower Income Areas	Higher Income Areas
Combined Population	131,667	136,136
Supermarkets/Small - #	28	12
Supermarkets/Large - #	8	16
Convenience Stores - #	6	7
Liquor Stores - #	20	12
Meat Markets - #	3	2
Fruit/Vegetable Markets - #	0	1
People per small supermarket	4,702	11,345
People per large supermarket	16,458	8,509
People per convenience store	21,945	19,448
People per liquor store	6,583	11,345
People per meat market	43,889	68,068
People per fruit/vegetable market	N/A	136,136

Appendix C:

Detailed Methodology

F.E.P. selected a small number of census tracts in Santa Clara County (see Appendix A for specific tracts) based on a combination of education, ethnicity, and poverty levels. The census tracts selected to represent lower-income areas were home to individuals who, by definition, are on average significantly less educated, more likely to live below the poverty line, and more likely to be ethnic minorities (non-white individuals) than Santa Clara County as a whole. By contrast, the census tracts representing higher-income areas have populations that are more educated, less likely to live below the poverty line, and more homogeneously white than the rest of the population.

All of the lower-income census tracts were in the City of San José. The higher-income census tracts were located in the following cities in Santa Clara County:

- Campbell
- Los Altos
- Los Gatos
- Morgan Hill
- Palo Alto
- San José
- City of Santa Clara
- Saratoga

Cities in Santa Clara County that were not included in the survey are Cupertino, Gilroy, Los Altos Hills, Milpitas, Monte Soreno, Mountain View, and Sunnyvale.

With pro bono assistance from the Humane Research Council (HRC), an outside nonprofit research firm, F.E.P. designed a comprehensive survey (see Appendix D) to assess the availability of fruits, vegetables, and other products at food establishments in the areas of interest. F.E.P., in cooperation with HRC, trained volunteers to accurately code product availability and quantity. Volunteers typically worked in teams of two or more to increase accuracy.

Using the ReferenceUSA® database of 14 million U.S. businesses, F.E.P. surveyed all food-related locations in the census tracts of interest. Fifteen of the locations from the ReferenceUSA® database were closed; these locations were omitted from the sample (as well as others that closed following data collection), along with 11 duplicate records.

Additionally, two locations refused to cooperate with the F.E.P. survey. F.E.P. is also aware that some food locations have recently opened in the study areas, but an accurate count of new locations is not available.

Once all results were obtained, HRC cleaned the dataset, coded the results, and analyzed the findings for F.E.P., providing basic summary statistics and frequency counts.

Appendix D:

Survey Instrument

The F.E.P. survey captured the store name and full address for each location in the sample. Store type, based on NAICS classification, was appended from the ReferenceUSA® database. Trained F.E.P. volunteers collected the following information for each of the fruits and vegetables listed in the table below (note that the lists differ slightly for fresh, frozen, and canned items):

- Availability of non-organic (conventional) variety of fruit/vegetable
- Availability of organic variety of fruit/vegetable
- Whether or not the total quantity (including both non-organic and organic) is fewer than five items
- The lowest price and corresponding unit
- Any additional notes or comments submitted by the surveyor

Fruits	Fresh	Frozen	Canned
Apple	X		X
Banana	X		
Blueberry	X	X	X
Cactus Fruit	X	X	X
Cantaloupe	X		
Chayotes	X	X	X
Grapefruit	X		X
Grapes	X		
Guava	X	X	X
Honeydew	X		
Lemons	X		
Limes	X		
Mangos	X	X	X
Mixed Fruit	X	X	X
Oranges	X		X
Papaya	X	X	X
Peach	X	X	X
Pear	X		X
Persimmon	X		
Pineapple	X	X	X
Plantain	X		
Pomegranate	X		
Strawberry	X	X	
Tomato	X		X
Watermelon	X		

Vegetables	Fresh	Frozen	Canned
Artichokes	X	X	X
Avocado	X		
Bell Pepper	X		
Broccoli	X	X	
Cabbage	X		
Carrot	X	X	X
Cauliflower	X	X	
Celery	X		
Chiles	X	X	X
Collard Greens	X		
Corn	X	X	X
Fava Beans	X	X	X
Garbanzos	X	X	X
Green Beans	X	X	X
Kale	X		
Lettuce	X		
Mixed Vegetables	X	X	X
Mushroom	X	X	X
Nopales	X	X	X
Onion	X	X	
Peas	X	X	X
Potato	X		X
Spinach	X	X	X
Squash	X	X	X
Sweet Potato	X	X	
Zucchini	X		

F.E.P. volunteers also collected the following information for each of the meat and dairy alternative products listed in the table below:

- Availability of the product
- Whether or not the quantity is fewer than five items
- The lowest price and corresponding unit
- Whether or not the store has vegan versions of the product available

Meat Alternatives	Dairy Alternatives
Meatless Burgers	Soy Milk - Refrigerated
Soy Hot Dogs	Soy Milk - Non-refrigerated
Tofu	Rice Milk
Seitan	Nut Milk
Tempeh	Soy Cheese
Meatless Bacon	Rice Cheese
Meatless Deli Slices	Soy Sour Cream
Meatless Sausage	Soy Cream Cheese
	Soy Yoghurt

Finally, F.E.P. volunteers also answered the following questions for each survey location.

- Does the store carry dried fruit in bags or in bulk?
- Does the store carry dried beans in bags or in bulk?
- Does the store carry liquor?
- Does the store carry beer?
- Does the store carry wine?
- Does the store carry tobacco products?
- Does the store provide an in-store salad bar and/or make available prepared salads?
- Are fresh fruits and veggies promoted near the front of the store or on aisle “end caps”?
- Are meat/dairy alternatives promoted near the front of the store or on aisle “end caps”?
- Does the store have outside signage promoting alcohol and tobacco products?
- Does the store have a lot of meat/dairy available, but relatively few fruits, veggies, or alternatives?
- Does the store have any information or carry literature about vegetarianism or veganism?
- Does the store provide a clean and sanitary environment for fresh fruits and veggies?
- Does the store have a separate organic or “health food” section?
- Does the store have any information about lactose intolerance and/or alternatives to dairy?
- Does the store accept food stamps?
- Estimate the quality of the available fruits and vegetables (i.e., freshness) – Poor, Fair, Good, Excellent
- Store hours for each day of the week



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