

HUNGRY FOR CHANGE

THE MORSE HIGH SCHOOL CAMPUS FOOD SURVEY



2006

A Project of:
San Diego Urban Farms

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INTRODUCTION

Morse High School students, teachers and administrators recently completed a survey process with the community-based organization San Diego Urban Farms (SDUF) to evaluate students' relationships with food. The purpose of the survey was to evaluate the students' eating habits, their ability to access fresh foods, their activity levels, as well as health issues their families may be facing. The survey preparation process included queries related to the campus food service; environmental science, nutrition and culinary arts curricula; a new campus farm; local small business opportunities; and community education, and each are being considered as possible methods to help address health-related issues for many of the students at Morse.

The results from this survey have demonstrated a hunger for change and are seen as a first step towards addressing these food-related health issues.

BACKGROUND

In 2004, Morse High School Principal Rocio Weiss pursued solutions to campus educational issues and critical health and life-style concerns for a culturally diverse student population. One answer for Weiss and a group of dedicated teachers was the creation of a small learning Academy on campus, called Terra Nova. Weiss also envisioned a campus farm as a means to link the Terra Nova environmental science, nutrition and culinary arts curricula together as a living laboratory with the potential of community-wide benefit.

A program of the Backcountry Land Trust, entitled ROOTS, was enlisted to begin the process of developing the campus farm while working with the Terra Nova team to address relevant food related topics and hands-on learning experiences in the classroom. ROOTS and the Morse Garden Club have cultivated a preliminary garden site on campus this year.

SDUF partnered with the nutrition and culinary arts students and teachers to identify the criteria needed to design and implement a community food survey on the Morse High School Campus. The survey was designed in the fall of 2005 and distributed to 9th and 10th grade level English students in February of 2006. Morse students studying statistics and computer science tallied and evaluated the raw survey data, and a San Diego State University student majoring in statistics then performed an extensive analysis of the data. As a result

of these efforts, the new data captured baseline information relating to campus food and student health, and will serve as an evaluation tool for the Terra Nova program.

Additionally, Morse culinary arts' freshman assessed the cafeteria, vending machines, and snack carts for the types and quality of food and snacks made available to students; and, the Director of the San Diego City Schools' Food Service department completed a survey of the district's current student food policies and facilities, and near and long-term planned changes.

Funding to implement the survey was received via a Community Development Block Grant awarded by former City of San Diego Mayor Dick Murphy and City Council members Tony Young and Donna Frye. Morse High School is within Tony Young's council district.

THE FOOD SURVEY PROCESS

SDUF worked with the Los Angeles-based Community Food Security Coalition on preliminary research and planning for the survey, and through collaboration with Morse High School teachers and administrators. A small group of junior and senior Culinary Arts students acted as youth-oriented editors of the topics being considered and determined the best way to ask the survey questions so they would be understandable to the other students. They visited each 9th and 10th grade English class to explain the reason for the survey to the students. They also distributed the surveys to the teachers and collected them once completed.

Seven areas of interest were determined valuable for project planning and implementation:

1. Student food choices - accessibility of types of foods; the price of food; and family composition and socioeconomic status
2. Quality of food
3. Health and activity
4. Hunger
5. Perceptions/attitudes/needs related to food
6. Awareness of the food, nutrition, and agriculture resources now available on campus or potentially to the community
7. The composition of the student body; ethnicity and gender, are woven through the analysis

Questions pertinent to these topics were designed to give a snapshot of the community's relationship with food and health. To achieve this, some questions were targeted to both the student and their families. The results presented here are summary interpretations, so cannot be guaranteed scientific accuracy. Even so, these outcomes are straight-forward, and compel further research.

As with surveys in general, not all of the questions on all surveys were answered by all of the respondents. The data was evaluated based on this variable. 633 surveys were collected and 443 surveys were formally evaluated. The evaluated surveys represent approximately 15% of the campus population. 9th and 10th grade students were chosen, as they will continue on at Morse for a series of years and will be able to reflect directly on the changes over time as the Terra Nova program grows and changes. Of these students 51% were girls, 49% were boys.

ANALYSIS OF THE FOOD SURVEY RESULTS

STUDENTS' FOOD CHOICES (Accessibility, Price, & Family Composition)

- Though we looked at a variety of topics relating to food at Morse, the most startling results pertain to student food choices.
 - The first question on the survey asks “*Do you eat fruits and vegetables every day?*” 65% of those responding answered yes, but of those 43% (190) responded that they had only 1 to 2 servings per day, 29% claim 3 to 4 servings per day. Significantly, 35% (150), over one-third of the 9th and 10th grade student respondents, do not eat fresh fruits and vegetables each day.
- The fact that 62% of students surveyed eat two, one, or no servings of fruits and vegetables each day highlights a potentially severe health-related issue at Morse.
- Additional questions probing what respondents chose to eat revealed that:
 - Many of the students are eating fast food regularly: 35% get fast food a few times a week, and 52% a few times a month. Only 2% claim never to eat fast food.

- Sugared drinks like soda and Gatorade are commonly consumed a few times a day (35%). One third (33%) drink them every week; just 5% claim to never drink them.
 - Less than 4% reported never eating chip snacks; for those that do eat them, 42% are a few times a week, 35% everyday, and 20% a few times a month.
 - Dessert items, like cake, followed a similar consumption pattern: 3% never, 39% weekly, 27% daily, and 31% monthly.
- Considering the similar patterns of these results, the figures are likely from the same groups of respondents, that is, the student who eats fast food on a weekly basis possibly also consumes other non-nutritious items at the same frequency. But, this can only be a proposition without further statistical testing on the data. Those who do have multiple daily and weekly habits would be at risk of compounding negative impacts on their health.
 - Shockingly, only 3%-4% of survey takers eat only nutritious foods.
 - Are these choices based more on quality, access, price, or attitudes about food? Most likely it is a blending of all of these factors influenced by the environment within which the student resides. Eating habits learned at home; life-style marketing by the food industry; and quality, price and ease of access of the foods available at school, all influence these choices.
 - The 2000 US Census data describes the incomes of households within the “92114” zip code (where Morse resides) as the following: 53.9% of households make \$49,999 or less, the average family size is 4.04, and the population of that zip code is 29% African-American, 25.5% Asian, and 30% Hispanic, 15.5% Other, totaling 100% of the area population. The demographics of the survey takers vary from the Census data, as students attend Morse from a total of four zip codes. The survey was taken by 17% African-American, 14% Asian, 26% Filipino, 31% Hispanic, 4% White, and 8% Other. Of the “92114” population of 66,837 – 9,022 people are below the poverty line, or 13.5%.
 - These financial factors, though not a guarantee, can influence the quality and quantity of food consumed by youth and thus their eating habits and the quality of health. Fresh fruits and vegetables, especially if grown organically, are often too costly for families with limited incomes to afford.

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- About half of survey respondents generally spend less than \$10 a week on food at school. 21% spend between \$11 and \$20 per week.
- We can only speculate the reason for these spending choices, as it may be students are packing lunches at home, or, they may find the food choices at school less than desirable and eat off campus after school; it may mean they are spending all they have. This topic warrants further study. According to Principal Weiss, some students have lunches subsidized through government programs as nearly ½ qualify for these programs.
- The structure of the families may also influence access to good nutrition and healthy lifestyles.
 - 51% of respondents live within a nuclear family structure, 24% live with one parent and siblings, and 5% live with grandparents. The balance live with one parent, live alone (2%), or “other”.
 - 77% of these same families shop for their produce at supermarkets; of those shopping elsewhere, 22% chose farmers’ markets as an option for purchasing produce, with ethnic markets at 23%, produce stands at 23% and fruterias at 22%. The vast majority, 80%, of these families access supermarkets by personal automobile rather than via transit, biking, walking or carpooling.
- Within the “92114” zip code there is only one “major supermarket”, Food for Less, located 2.96 miles from Morse and the Skyline neighborhood. Closer by is a Ralph’s Grocery on Alta View Dr. in zip code 92139. Albertson’s supermarket is in Lemon Grove, 3.74 miles to the east. Convenience and liquor stores are easily accessible in the surrounding community but are generally expensive and have little in the way of high quality, fresh produce. To the contrary, these stores typically market the high carbohydrate, high fat and sugar-rich products that are contributing to the health issues students are facing. Walking to a supermarket in the Skyline District is nearly impossible.

QUALITY OF FOOD

- Clearly, food quality will influence choice. Fruits and vegetables picked unripe, waxed, packed, shipped, stored then displayed for purchase, typically travel thousands of miles from farm to plate. It can be days from the time food is picked till the time it reaches the table. Quality and nutritional content often suffer. How many times will a child eat a rubbery carrot or a mushy apple? Food preparation is also important. Understanding how to prepare broccoli for a child's pallet will make all the difference as to whether they will be a broccoli-eating adult!
 - The quality of fruits, vegetables, and dairy purchased by respondents families were ranked below average 2-3 times more often than were the other food categories of meats and breads. 11% of vegetable rankings were less than '3' (ranked 1 – 5, 5 being best), 10% of dairy, 6% of fruits, 3% of meats, and 5% of breads. All of the food groups except dairy were equally likely to receive ranking, but dairy was not ranked at all 15% of the time.
- This could be an indicator that dairy is being excluded from many diets. Overall, foods tended to rank above average.
 - After eliminating non-responses, the top response to the following question "What makes it difficult to eat fruits and vegetables daily?" was: "other" (38%). As an immediate follow-up question to the first survey question "do you eat fruits and vegetables every day?" it may be that respondents answered in this manner because they DO eat fruits and vegetables so none of the answers pertained, or they may be the students who fit within the group that consumes fast food regularly that is captured above. More research is needed in this category.
 - 37% of the respondents chose "not enough time to prepare meals at home" as their difficulty; 25% said "I don't know how to cook vegetables" which tied with "I do not choose to eat healthy foods". 22% said that "transportation" was the issue as well as the fact that "quality was poor." 21% felt "fresh produce was too expensive" as reasons to avoid fruits and vegetables.
- Life-style issues, including the time and the knowledge it takes to cook at home, and transportation to markets that sell quality produce, appear to be hurdles in the quest for better nutrition. While learning about cooking and allowing time to cook are behaviors that can be modified, accessing markets that sell affordable, quality produce is a community-based barrier to good health.

- Low fat or no fat foods (39%), as well as vegetarian foods (39%), along with fresh produce (34%), and low or no sugar items (32%), were the top foods identified as being difficult to find in their neighborhoods, yet are needed to improve diet.
- Evidently there is awareness within the survey group about what constitutes a good food choice, though they believe these items are difficult to access in their neighborhoods. This could also be a perception based-on the food served at the Morse campus.

HEALTH AND ACTIVITY

- Good health and quality of life are inextricably linked to food choices and regular physical activity.
 - In a question that allowed for multiple choices, an extremely high occurrence of diabetes (52%) and high-blood pressure (49%) was reported in the student households. Cancer in the household was reported by 28% of respondents with obesity reported at 27%. 31% of survey takers did not answer this question, which includes those whose households have none of the listed illnesses.
- Each of these maladies may be linked to poor nutrition and inadequate exercise.
 - Of ways to help the community improve its nutrition and get more exercise, “improved menus in local schools” was selected frequently, receiving 58% of the selections. At 51%, “more recreation opportunities, bike and walking trails and parks” came in second; this choice was followed closely by “better access to government food programs like food stamps, school meals, WIC, Summer Lunch”, at 48%. 43% also chose “more nutritious foods at food pantries and other agencies supplied by the Food Bank” as well as “more nutrition education programs”.
- These results indicate awareness on the part of the students regarding what is not working well locally. Additionally, the need for improvements in existing community education and outreach is strongly indicated.
 - This student body is fairly active. 40% of students get at least ½ hour of physical activity daily. 30% reported often and 27% reported “sometimes”. Only 4% stated they never get physical activity.

- Morse has a broad range of sports and other physical activity available to the student body.
 - Of potential barriers to physical activity, “no time to exercise” was checked 45% of the time. 31% indicated an “other” reason it is difficult to get exercise. This was closely followed by “I don’t feel safe walking or bicycling in my neighborhood” (30%).
- Mapping the assets of the Morse/Skyline Community in terms of access to safe, recreational activities, whether indoor or outdoor would be a good exercise for the community to undertake. Healthy communities create healthier families.

HUNGER

- 22% reported going hungry when asked: “Is there ever a time when your family does not have enough food to eat?”
- Such a disturbing figure should be analyzed alongside other measures including access to free or subsidized foods. It is also speculated that this number may be low based on the high number of surveys where this question went unanswered. Family pride is a factor as many adults feel ashamed that they cannot care for their families without asking for assistance. Food quality and freshness is often sacrificed when food is donated through food pantries, and fresh food is rarely distributed due to storage issues. These practices, while well-meaning, may be setting young people up for health problems in the future.

PERCEPTIONS/ATTITUDES/NEEDS RELATED TO FOOD

- Students were asked to rank in order of importance what initiatives they would support to improve community nutrition. Many did not indicate a ranking, yet marked their choices (26%). Of these, most chose “more fruits and vegetables in local stores.” (33%). Non-response rates were very high, greater than 64%, which could indicate that students are not familiar with, or have not thought much about, community nutrition. Of those who did rank selections, “more fresh fruits and vegetables in our school meals” was the most often ranked option, as being “most important.”

- As compared to previous responses relating to healthy food availability (where it seemed that students had a sense of what was needed to be healthy themselves), it appears that this did not translate to things that could be done to improve the health of community-members (based on the answers in the bullet above), other than how it pertains to their school; which makes sense as their regular sphere of influence.
 - 38% of respondents felt it was important to “create more ways to improve the food system through food policies and nutrition advocacy”.
- This number (38%) though low, is still significant in terms of a discussion regarding the development of a regional food system for the San Diego area. This is a concept whose time has come elsewhere in California and across the nation, where local food production is afforded greater consideration similar to air and water quality or energy use. It may also be that students who live in an environment where health and quality-of-life issues are right in front of them (52% of families have a member with diabetes) see the need to make change. As Terra Nova grows, so may the number of students who feel this concept is important to address for the region as a whole.
 - 40% of students have a garden at home. Many show interest (“maybe”) in using a community garden were it available (62%). But when asked somewhat differently, most students were not interested in purchasing produce from a campus garden (63%), or participating in the garden program (72%).
 - Many also have family members with a history of farming or gardening (44%). Including extended family, the number with farming experience grows to 53%.
- It appears that students sense the broader benefit for their community (of a farm on the campus) but have little understanding of its relevance to improved educational possibilities. Considering that the Terra Nova program will not begin until the fall of 2006, this is not surprising. There is a wealth of knowledge and experience in gardening and food production that can be “cultivated” in parents and grandparents to support the developing Terra Nova project and farm site. This project has the ability to be a powerful catalyst for community engagement in terms of human capital and contribution.

- When asked what agriculture-related jobs they would like to see developed, the top three selections were chef (56%), restaurant owners (45%), and nutritionists (44%). Gardeners and food producers followed closely with 42% and 41%. 15% did not respond.
- Terra Nova can link the curriculum and learning environment to the local production of food that will provide health and economic benefits to the surrounding community, and develop high-quality jobs after graduation.

AWARENESS OF CAMPUS RESOURCES

- Little more than half of the students were aware of Morse High's new garden site or whether food was raised organically or not. They clearly know of cooking classes (94%), and many are aware of the availability of nutrition teaching materials (62%).

NEXT STEPS?

The survey revealed some startling and compelling evidence for change but also that Morse High School is on the right track for its students and the surrounding community. Suggested next steps are:

- Implement strategic planning efforts to develop goals and action steps for Terra Nova and the farm as they pertain to the health, nutrition and physical activity of the student body reflecting on the results of this survey. Create a set of Guiding Principles. Develop a fundraising plan.
- Examine the “threats” to the plan
- Develop a detailed farm design plan that integrates seamlessly with the Terra Nova curricula
- Create mechanisms for community organizing, education and outreach to build local and broader support. Use the survey results as a tool for advocacy work.

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- Involve the community and provide incentives for their participation. Respect cultural and professional differences.
- Partner with, and build on, the successes of other organizations in the community.
- Work with elected officials and the San Diego County department of Health and Human Services to institute policies, including land-use policy changes for urban food production.
- Work with the Food Service department at San Diego City Schools to develop cafeteria, cart, and vending machine programs for Morse that tie in with Terra Nova efforts including utilization of produce grown on campus and the development of a Farm to School program (<http://www.farmtoschool.org/>).
- Work with academic and professional organizations to further the outcomes of this initial research. Promote the development of a university “teach the teachers” training program. Develop support from restaurants, chefs, grocery stores, farmers, and trade associations.
- Advocate for more access to fresh food for the community as a whole. Develop mechanisms for access locally, whether it is weekend neighborhood markets, where farmers sell direct to the public, or the creation of programs for local convenience store participation. Community gardens are an excellent opportunity as well.
- Students need to have leadership roles throughout the process.
- Plan to refine and repeat the survey as an entrance and exit assessment for students. Use this current survey as a baseline to build upon.
- Consider the larger picture that includes the campus as a gateway to address issues in the surrounding community. Morse is the center of the Skyline Community and a place of civic engagement. The farm program should be designed to create a place for the neighbors to participate.
- Measure and evaluate the process regularly for adjustment, realignment, and celebration of successes.

THE STATE OF OUR FOOD SUPPLY

Consider that according to the San Diego County Farm Bureau (June 2006, Executive Director Eric Larson) approximately 95% of the food grown in the County of San Diego is shipped to markets outside of the region - meaning that an equivalent amount of food comes into San Diego from other regions and around the world.

According to The Leopold Center for Sustainable Agriculture the average food mile from farm to plate is now approaching 2000. A study recently completed in Iowa, an agricultural state, shows the economic pay-offs tied to healthy eating and a local food economy. Follow the link for more information http://www.leopold.iastate.edu/news/newsreleases/2006/healthy_052306.htm .

These similar circumstances pertain to San Diego as well. We can be described as a “food insecure” region even-though food is abundant at local retailers.

This is not only a San Diego issue, but a state-wide phenomenon based on a series of what seem to be unrelated issues that are routinely addressed separately. “We are treating symptoms with “band-aids” while ignoring the underlying illness”, according to Katy Mamen et al, authors of *Ripe for Change – Rethinking California’s Food Economy...* To read this report in full go to: www.isec.org.uk .

Bio-security and the vulnerability of our agricultural industry are now listed by The San Diego County Department of Weights and Measures as a serious issue. “First Detectors” help to monitor the introduction of new plant pests or unusual pest outbreaks in an effort to keep the food supply safe.

Having local control over our food supply is more important than ever and for multiple, compelling reasons.

CONCLUSION

Is the Morse Community hungry for change? It appears so.

Do Morse and the San Diego City School District have an obligation to the health of the students, and hence that of the surrounding community? Based on the information collected in this survey, as well as other critical evidence, SDUF believes the answer is yes.

Can urban farms, like the one planned for Morse, assist with community food needs while also building a new form of green infrastructure that is of economic benefit as well? Can Morse High School be the pilot for similar efforts throughout San Diego's urban areas? SDUF believes that it can.

Though this survey process has provided guidance, regarding the need and the promise for the Terra Nova program, several hurdles to implementation remain including bureaucratic/governmental status-quo (slow to change), limited funding opportunities, a steep educational learning curve for the students and the public, and simply the collective will to change.

It is SDUF's contention that local solutions to food and health issues can become powerful forces for change. Through the continued efforts of the teachers, administrators and students at Morse, Terra Nova can contribute to a transformation in education. By providing nutritious food for growing minds and bodies; feeding people in need; promoting the development of local business opportunities; linking consumers with local farmers; and helping to change how the region thinks about food, Morse can be a model of community stewardship for the future.

OTHER RELEVANT SURVEYS

TERRA NOVA HEALTHY CAMPUS SURVEY

Culinary Arts' freshman and upper-class member leadership reviewed the facilities on campus to see what was made available to students. Vending machines, lunch carts, the cafeteria and even water fountains were counted and rated. Some of the results are listed below.

- The teams found a total of three food vending machines with candy dominating the total numbers of slots available 3 to 1 over chips (candy sixteen slots, chips five slots). Candy cost from 50 cents to \$1.25, chips ranged from 75 cents to \$1.00. Cookies, pastries, granola snacks and trail mix totaled eleven slots together averaging 75 cents each.
- The teams found ten beverage vending machines. On the day of the survey, the Coca-cola vender was on campus removing soft drinks from the machines and replacing them with waters, juices and energy drinks. Many energy drinks remain high in sugar and caffeine but the benefits of the overall change are substantial!
- There are three types of fruit drinks (Snapple types) with seven slots, three types of water with ten slots, four types of energy drinks (Gatorade types) with nine slots, two types of milk with nine slots and two types of flavored teas with two slots. Drinks ranged from \$1.00 to \$1.25.
- These beverages are available throughout the entire school day and also at lunch carts and some in the cafeteria.
- There are 26 functioning water fountains; though some are of low quality. Water is available to students during class as well.
- The student store sells chips, cookies, pastries and candy at a cost of 75 cents to \$1.00.
- Lunch carts sell pizza, soda, water, PowerAde, fruit snacks, chips, cookies, burritos, Hot Pockets, Rice Krispie treats, chicken teriyaki, Subway Sandwiches and are only open during the lunch break. All proceeds go back to the school food service.

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- Breakfast is available on campus. There are only school buses for special-needs students.
- Between 800 and 950 students eat lunch daily in the cafeteria on average. 30 to 40 teachers eat lunch in the cafeteria each day.
- There is no after school snack program.
- There is a working kitchen on campus where food is prepared for Morse and seven other schools; food is also brought in from other prep sites.
- There are 27 cafeteria workers on campus. There are not enough tables for everyone to sit down at lunch.
- There is no school salad bar.

FOOD SERVICE DIRECTOR SURVEY

Gary Petill, director of the Food Service Department for San Diego City Schools, answered a series of written questions. Some of the most relevant are captured below.

- The school district will have a Wellness Policy in place by July of 2006
- The district recently restricted the sale of soda at Morse High School, but it does not restrict access to vending machines or foods of low nutritive value
- A policy encouraging fund-raising efforts supportive of healthy eating or prohibiting less healthy foods is under development.
- Meals include appealing, low-fat items; the district offers culturally appropriate menu items

- Many schools have salad bars
- Low-fat and skim milk is available
- Non-dairy vegetarian options are available; food prep is done to reduce fat; moving towards non-processed foods
- Are healthy foods promoted outside of the cafeteria on campus? – no, but healthy items are promoted in the cafeteria
- Is food use prohibited as a reward? – Under study currently
- Are meal periods long enough for students to eat, be physically active and socialize? – No (30 minutes in length)
- Cafeterias are clean, safe and pleasant
- Produce is not purchased from local farmers, but they are reviewing Farm to School and organic produce as alternatives
- The districts priorities are: #1- quality of food, #2 – food produced locally, #3 – ease of preparation, #4 – price, and #5 – food grown sustainably
- Vending machine contracts are with Coca-Cola; commercial food chains are permitted to market in schools
- Breakfast is served at some schools
- Nurses are responsible for nutrition, health and physical activity policy
- There is a system for incorporating student and parent input
- An executive chef has recently been hired

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Enormous gratitude goes to Shirley Miranda and her "Statistics 1-2", "Computer Science 1-2" and "Advanced Placement Computer Science" classes. Those that went the extra mile are Michael Paz, Randall Rivera, Ernestine Miranda, John Hebron, and Melvin Lazo.

Kudos and thanks go to Julia Dashe from ROOTS for her support in creating and implementing the survey while working tirelessly with the Garden Club to build and plant the new campus garden.

Stephanie Buckley, a San Diego State statistics major, brought the advanced level of statistical analysis to the project along with her passion for healthy food and environmental quality. This report would look very different if it weren't for Stephanie – thank you!

Great appreciation goes to the Terra Nova team of teachers who saw the value of looking deeper into the anecdotal evidence supporting the need for their program and a farm to serve the campus and community. Hats-off to the members of the Garden Club too!

Endless thanks goes to the San Diego Urban Corps who has acted as the SDUF fiscal sponsor throughout this process.

To Mayor Dick Murphy and Council members Donna Frye and Tony Young – thank you for understanding the importance of this effort and supporting the notion of systematic change for the greater good.

Thanks goes to the English teachers that allowed us to invade their classes to distribute the survey; to Regions Restaurant for holding fundraisers to support the vision of Terra Nova, and to Back country Land Trust who helped get the ball rolling on this project.

Finally, to the Morse High School Principal, Rocio Weiss, who held the vision for us and crafted the process to get the work done: thank you for seeing the importance of this effort and the value it can bring to the students at Morse.

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For more information on community food assessments and food security visit the Community Food Security Coalition on-line at: <http://www.foodsecurity.org>

The mission of San Diego Urban Farms
is to recreate the direct links between our communities,
the health of our citizens, and fresh locally grown food.



Our Edible City!

Access questions 3,4,6,7

3.) What makes it difficult for you to eat fruits and vegetables everyday? (check all that apply)

Fruits and vegetables are too expensive in stores	76	78	21%
Fruits and vegetables are of poor quality	57	82	22%
There are few stores in my neighborhood that sell fruits and vegetables	42	73	20%
I do not have transportation to stores with quality fruits and vegetables	109	83	22%
I do not have enough time to prepare meals at home	136	138	37%
My family does not like vegetables	16	51	14%
I don't know how to cook vegetables	82	94	25%
I do not chose to eat healthy foods	75	93	25%
Other	142	141	38%
no response	104	72	16%
total	839	833	371

4.) Where does your family shop for fresh fruits and vegetables?

Supermarkets	316	312	77%
Ethnic Markets	107	94	23%
Fruterias	68	89	22%
Other	105	60	15%
Produce Stands	74	94	23%
Farmers Markets	107	90	22%
Flea Market	10	58	14%
no response	2	37	8%
total	789	797	406

6.) Which foods would improve your diet but are difficult to find in your neighborhood?

Dairy products	85	101	27%
Protein sources	101	111	30%
Fresh fruits and vegetables	160	127	34%
Other	40	50	14%
Low fat or no fat menu items	210	143	39%
Low or no sugar items	150	118	32%
Vegetarian foods	156	143	39%
no response	87	74	17%
total	989	793	369

7.) How does your family get to the grocery store?

Carpooling	21	11	3%
Taxi	4	11	3%
Bike	10	26	6%
Walk	44	7	2%
Bus	15	30	7%
Car (your own)	536	344	80%
no response	5	14	3%
total	635	443	429

Quality questions 1,2,5,8,9,10,11

1.) Do you eat fruits and vegetables every day?

Yes	407	279	65%
No	226	148	35%
no response	3	16	4%
total	636	443	427

2.) If yes, how many servings? (a serving is about 1/2 cup, a small apple, 1/2 banana, etc.)

0	93	82	22%
1-2	247	164	43%
3-4	173	109	29%
5-9	38	17	4%
10 or more	10	9	2%
no response	96	62	14%
total	657	443	381

5.) How do you rate the quality of the fresh food your family buys? (1=worst, 5=best)

rank:	1	2	3	4	5	total	1	2	3	4	5	no resp	total
Fruits	8	31	99	191	210	539	7	18	74	164	164	16	427
							2%	4%	17%	38%	38%	4%	
Vegetables	37	51	110	199	211	608	20	25	81	146	154	17	426
							5%	6%	19%	34%	36%	4%	
Meats	10	19	67	188	274	558	6	9	40	147	222	19	424
							1%	2%	9%	35%	52%	4%	
Breads	7	18	107	195	249	576	8	13	65	135	204	18	425
							2%	3%	15%	32%	48%	4%	
Dairy products	14	32	102	163	245	556	21	15	52	108	182	65	378
							6%	4%	14%	29%	48%	15%	
no response	--	--	--	--	--	7							
							3%	4%	15%	34%	45%	6%	
total	76	151	485	936	1189	2844	62	80	312	700	926	135	2080

8.) How often do you eat at inexpensive "fast food" restaurants like MacDonald's, Burger King, Kentucky Fried Chicken, or taco shops?

Never	16	8	2%
A few times a week	258	150	35%
A few times a month	283	224	52%
Every Day	41	48	11%
no response	6	13	3%
total	604	443	430

9.) How often do you drink soda like Coca Cola, Gatorade, or PowerAde (with sugar)?

Never	22	22	5%
A few times a week	267	164	38%
A few times a month	118	94	22%
Every Day	184	149	35%
no response	8	14	3%
total	599	429	

10.) How often do you eat chip snacks (Fritos, Hot Cheetos, Sabritos)?

Never	21	14	3%
A few times a week	238	178	42%
A few times a month	180	84	20%
Every Day	179	150	35%
no response	7	17	4%
total	625	426	

11.) How often do you eat cake, cookies, candy, ice cream, or other desserts with sugar?

Never	25	14	3%
A few times a week	242	162	39%
A few times a month	176	130	31%
Every Day	159	113	27%
no response	7	24	5%
total	609	419	

Price question 12

12.) How much money do you spend on food at school each week?

0	97	59	15%
\$1 to \$5	215	132	33%
\$6 to \$10	138	83	21%
\$11 to \$15	104	57	14%
\$15 to \$20	46	28	7%
\$20 or more	58	39	10%
no response	5	45	10%
total	663	398	

Perceptions/Attitudes/Needs questions 15, 20, 21, 29, 30, 31, 32, 33

15.) Which of the following would you support? (Check all that apply and rank in order of importance with #1 most important, #7 least)

rank:	0	1	2	3	4	5	6	7 no resp	ttl	
More fresh fruits and vegetables in our school meals	64	80	24	33	17	19	19	14	173	270
	24%	30%	9%	12%	6%	7%	7%	5%	64%	15%
More fruits and vegetables in local restaurants	74	40	28	20	28	32	28	16	177	266
	28%	15%	11%	8%	11%	12%	11%	6%	67%	15%
A salad bar in the school cafeteria	62	50	50	36	23	19	12	18	173	270
	23%	19%	19%	13%	9%	7%	4%	7%	64%	15%
More fresh fruits and vegetables at school carts	59	34	26	43	17	27	16	28	193	250
	24%	14%	10%	17%	7%	11%	6%	11%	77%	14%
Community gardens for people to grow there own food	66	45	17	20	30	17	23	39	185	258
	26%	17%	7%	8%	12%	7%	9%	15%	72%	14%
More fruits and vegetables in local stores	79	30	16	13	34	5	30	26	200	243
	33%	12%	7%	5%	14%	2%	12%	11%	82%	13%
More cooking and nutrition classes in our community	66	44	28	23	23	33	28	18	180	263
Other	25%	17%	11%	9%	9%	13%	11%	7%	68%	14%
no response	26%	18%	10%	10%	9%	9%	9%	9%		
total	470	323	189	188	172	162	156	159		1820

	1	2	3	4	5	6	7 no rank	total	
	89	51	59	37	22	14	21	6	299
	36	38	21	35	64	42	36	0	272
	72	67	50	37	25	24	22	7	304
	53	58	61	39	35	23	18	5	292
	46	18	22	31	26	25	85	0	253
	35	29	19	36	50	52	31	0	252
	78	39	29	34	30	45	28	4	287
--	--	--	--	--	--	--	--	--	4
--	--	--	--	--	--	--	--	--	61
409	300	261	249	252	225	241	22		2024

20.)	Do you have a garden at home where your family grows food?			
	Yes	182	167	40%
	No	333	251	60%
	no response	21	25	6%
	total	536	418	
21.)	If a community garden were available, would you grow food there?			
	Yes	110	55	13%
	Maybe	193	258	62%
	No	257	104	25%
	no response	26	26	6%
	total	586	417	
29.)	Would you be interested in buying fresh food grown at a community garden at Morse High School?			
	Yes	196	145	37%
	No	330	247	63%
	no response	58	51	12%
	total	584	392	
30.)	What kinds of food and agriculture-related jobs would you like to see developed in your community?			
	Gardeners	209	158	42%
	Restaurant owners	215	168	45%
	Food producers	192	154	41%
	Nutritionists	201	164	44%
	Chefs	280	212	56%
	Florists	106	105	28%
	Herbalists	123	104	28%
	Horticulturalists	59	73	19%
	OTHER	5	56	15%
	no response	90	67	15%
	total	1480	1194	376

31.a.) Are there Farmers or Gardeners in your family?

Yes	258
No	327
no response	--
total	585

31.b.) Extended family?

Yes	249
No	222
no response	--
total	471

31.)

grand total	1056
no response	63

32.) Would you like to be more involved in food and garden-related activities at school?

Yes	149
No	387
no response	150
total	686

33.) What is the most important thing that would help you improve you or your family's diet and nutrition? [write in]

Eating healthy food	10
No fast food	2
low fat food	1
nutrition	1
exercise more	1
no response	232
total	247

Health and Activity questions 16, 17, 18, 19

16.) Do you get at least 1/2 hour of physical activity per day?

Never	13	17	4%
Sometimes	119	125	30%
Often	129	112	27%
Always	351	167	40%
no response	20	22	5%
total	632	421	

17.) What makes it hard for you to get the physical activity you want? (Check all that apply)

I don't have time to exercise	206	151	45%
I have a physical disability that limits exercise	26	68	20%
Few parks and recreation opportunities	112	91	27%
I don't feel safe walking or bicycling in my neighborhood	105	101	30%
Not enough walking paths or bicycle trails available	56	67	20%
Recreation opportunities are too expensive	44	63	19%
Other	131	104	31%
no response	108	111	25%
total	788	645	332

18.) Does anyone in your household have any of the following conditions? (check all that apply)

Acid-Reflux	47	52	17%
Diabetes	198	159	52%
High blood Pressure	232	148	49%
HIV/AIDS	25	58	19%
Cancer	40	84	28%
Lactose Intolerance	46	62	20%
Obesity	55	82	27%
Persistent Dental Problems	36	64	21%
Other	29	81	27%
no response	164	138	31%
total	872	790	305

19.) What do you think are the best ways to help our community members improve their nutrition and get more exercise? (Select all that apply)

Better access to government food programs like food stamps, school meals, WIC, Summer Lunch	222	189	48%
More nutritious foods at food pantries and other agencies supplied by the Food Bank	177	168	43%
Improved menus in local schools	343	228	58%
More nutrition education programs	253	170	43%
More recreation opportunities, bike and walking trails and parks	226	198	51%
More ways to get involved in improving how the food system works (food policy councils, nutrition advocacy)	166	150	38%
Other	50	62	16%
no response	59	52	12%
total	1496	1165	391

Hunger question 14

14.) Is there ever a time when your family does not have enough food to eat?

Yes	98	87	22%
No	382	304	78%
no response	14	52	12%
total	494	391	

Awareness questions 22,23,25,26,27

22.)	Does Morse High School have a vegetable garden?			
	Yes	266	206	52%
	No	226	194	49%
	no response	51	43	10%
	total	543	400	
23.)	If Morse has a garden is it organic (no chemical pesticides or fertilizers)?			
	Yes	242	212	59%
	No	209	148	41%
	no response	82	83	19%
	total	533	360	
25.)	Does Morse have any food, nutrition, or agriculture teaching materials available for use?			
	Yes	274	235	62%
	No	216	142	38%
	no response	63	66	15%
	total	553	377	
26.)	Are there cooking classes at Morse?			
	Yes	450	389	94%
	No	152	27	6%
	no response	33	27	6%
	total	635	416	
27.)	If there are cooking classes, are they linked to the school garden?			
	Yes	233	186	50%
	No	147	183	50%
	no response	88	74	17%
	total	468	369	

Demographics questions 34,35,36,37,38

34.)	What is your current family composition (living/staying with you)? (Choose only one answer)				87%
	Live Alone	10	7	2%	
	Live with mother, father, & brothers or sisters	385	198	51%	
	Live with mother only	21	15	4%	
	Live with mother and brothers or sister	72	53	14%	
	Live with father only	10	11	3%	
	Live with father and brothers and sisters	18	39	10%	
	Live with one or both grandparents	26	20	5%	
	Other	68	43	11%	
	no response	59	57	13%	
	total	669	386		
35.)	What is your gender?				
	male	321	187	49%	
	female	312	198	51%	
	no response	47	58	13%	
	total	680	385		
36.)	What is your zip code?				
	92114	288	297	76%	
	91977	3	2		
	92139	58	78		
	91945	1			
	92113	5	4		
	92134	1			
	91913	1			
	no response	70	50	11%	
	total	427	393		
37.)	What is your ethnicity?				
	Asian	39			
	Mexican	84			
	White	12			
	Black	47			
	Hispanic	7			
	Mixed	1			
	Pacific Islander	9			
	Filipino	71			
	Guamanian	1			
	no response	80			
	total	351			
38.)	What grade are you in at Morse High School?				
	9th	192	132	36%	
	10th	281	209	56%	
	11th	10	7	2%	
	12th	22	22	6%	

no response	--	73	16%
total	505	370	