Challenging Food Waste and Hunger

An exploration of the interrelated issues of food waste and hunger in the United States, and finding solutions to limiting their prevalence in our local community

Tag Words: Hunger, New Brunswick, Elijah's Promise, City Harvest, Slow Food, Share Our Strength, Rutgers, Food Waste

Authors: Hans Alonso, Rati Anand, Aaron Oberstein, Kai Marshall-Otto, Raahi Upadhyay, Paul Valetutti with Julie M. Fagan, Ph.D.

Summary

Food waste and hunger are prominent issues in this country which are frequently overlooked. The United States is considered one of the richer countries of this world, however, it too suffers from the negativity of hunger and food waste. Hunger and food waste are caused by different factors such as poverty, ignorance, unemployment, increased cost of living expenses, and the tremendous gap which exists between the rich and the poor of this country. The amount of food wasted by businesses, schools, restaurants, homes, and supermarkets is absolutely ridiculous and amounts to about 100 billion pounds of food waste every year in this country alone. Millions of people are starving in this country even though there is enough food being produced that can feed billions. This problem is overlooked by many, but several different groups such as City Harvest, Slow Food, Share Our Strength, Day-End Dough-Nation Program, Feeding America, and many others have decided to take food that would originally go to waste and donate it to people who need it. These groups have succeeded greatly and because of their success we have decided to try to do something similar in New Brunswick. We, as a group, decided to contact local businesses such as Panera Bread, Dunkin Donuts, and Subway Restaurants, and ask them to donate food, that would have been thrown out, to the people of New Brunswick who need it. We took this food and dropped it off to a local soup kitchen, Elijah's Promise, with the hope that this will not only help the hungry people of this city but also influence others to help them.

Video Link

Food Waste and Hunger 2011: http://www.youtube.com/watch?v=32T8L0PiVoE

The Issue: Hunger and Food Waste

Introduction to Hunger (AO)

Although hunger has existed from the beginning of human history, there has never been a time when hunger and food waste can be so inexplicably linked. From the time of the middle of the 19th century, mechanization has fueled the agricultural revolution, transforming an American landscape, which had recently employed more than eighty percent of its population through agriculture. Improvements in plant breeding and agricultural techniques also contributed greatly to an increase in crop yields, allowing for a rapidly expanding American population to continue growing. Changes in production technique, including the availability of low-cost, factory synthesized inputs allowed farmers to create more with less. This was the first time in history when agricultural science began to be seen as a law of minimums, a reductionist theory claiming plants need a limited number of nutrient inputs to produce abundant crops and that these inputs can be manufactured in factories to be utilized as necessary. All of these advances in agricultural technology allowed for a surplus of crop production.

Beginning in the 1850's, advances in mechanization allowed farmers to complete their labor-intensive fieldwork with less laborers. This effect was two-fold, it allowed farms to expand and grow as they saved money on labor. Further, it created an American workforce no longer bound to the field; replaced by efficient machines workers were forced to seek work elsewhere. As workers streamed from the fields into factories, a transition from an agrarian nation to one based on manufacturing was taking place.

By the middle 1930's, many American factories had been designed to produce nitrogen-based products, including ammonia and nitrate. These chemicals were then used in munitions manufacturing to supply the United States war effort for World War II. At the end of the war many of these factories were left with a product with no market. An interesting shift was made and these nitrogen-based compounds gave rise to the burgeoning fertilizer and pesticide industries. American farmers now had access to cheap, laborsaving chemicals by which to run their farms.

It is at this point in American history, just after the commencement of WWII, that a true surplus in crop production was available to the public. Agricultural surplus allowed for the inception of a food processing industry that converted fresh crops into less perishable forms. A shipping industry developed as America's infrastructure grew, enabling regional and seasonal delicacies to be available year-round. This newly realized food movement, made possible by the ease of shipping, also allowed for the burgeoning food processing industry to make their products available on a national level.

The effects of the transition of America from an agricultural nation to one based on manufacturing and production allowed people to migrate to more urban settings in search of work. Instead of families having to produce all of their food through careful cultivation, ever-expanding farms began to provide the food for an entire nation of people who did not grow and raise their own crops. A disconnect arose, removing people from the arduous task of providing their own sustenance. Coupled with this was the cheap availability of food products.

Eventually America metastasized into a country focused on industry, manufacturing, and other work disassociated from agriculture. A food industry was born to provide workers with the products they needed to support both themselves and their families. As large farms continued to envelope small farms, perpetuating the growth of the former, food continued to drop in price. The fledgling food industry was able to purchase raw food materials to sell post-processing at a considerable market profit.

All of the aforementioned advances in agricultural technology, production, manufacturing, infrastructure, shipping, and so on gave birth to today's modern food industry; an industry rife with over-consumption and abundant waste. The availability and low-costs of most foods leave a current consumer with very few hesitations concerning the wasting of food. Adding to this is the disconnect we see between agricultural production and consumption, removing people from the reality of the time and effort involved in producing their own food through gardening or farming. A society has been created which fails to recognize the implications of their waste. Food can be purchased cheaply on a whim, to be partially consumed, the excess discarded with no detriment to the consumer. To be able to close the doors of wasted abundance born of simple ignorance, a connection has to be reestablished between how people view food production and food waste.

The Economic Research Center, a subgroup of the United States Department of Agriculture, has been conducting thorough research on hunger and food insecurities in the United States since 1995. Each year they compile statistics concerning food insecurities in the United States and their detailed reports enable social science scholars and other social scientists to better analyze at risk populations to identify potential solutions to this harrowing problem (USDA 2010). In their most recent report released in 2009, the ERS claimed, "85 percent of U.S. households were food secure throughout the entire year and at least 14.7 percent of households were food insecure at least some time during that year." This is the highest percentage reported since the inception of data collection in 1995 (USDA 2009). According to the latest United States census data, released April 1, 2010, the resident population of the United States was over 308 million (US Census 2010). This means that in 2009 more than 45 million men, women, and children in the U.S. faced food insecurities at some point during that year, a staggering and almost unbelievable number.

The USDA defines food insecurities in two categories, low and high, with the latter and more severe categorization including some degree of hunger. The former refers to reports by individuals of, "reduced quality, variety, or desirability of diet with little or no indication of reduced food intake" (USDA 2011). High food insecurities include, "reports of multiple indications of disrupted eating patterns and reduced food intake" (USDA 2011). These may not seem like stark or dire definitions but I believe the severity inherent in hunger is powerful enough. Having to spend a day, a night, or any amount of time under suffering from hunger should be a rectifiable problem within our modern society; there are many tangible solutions if people are willing to search in the right places to come together as a community.

Malnutrition is a serious and potentially devastating result of undernourishment. The World Health Organization describes malnutrition as getting not only inadequate food but also the wrong types of food to properly supply the energy and nutrients for healthful growth and maintenance. Further, in the absence of a variety of fresh and available foods, there is often a

notable decline in health, especially in that of infants, children, and the elderly (Habicht et al., 2004).

A deficiency of a vitamin as simple as vitamin A can lead to poor vision or even blindness in children. Calcium deficiencies can lead to weak bones and skeletal structure as well as disrupted neural signaling. Lack of iron causes the blood ailment anemia. Stunted growth, cretinism, hearing impairment, neurological dysfunction, and even death can all result from a lack of access to the vitamins, minerals, antioxidants, and other nutrients found in a balanced diet containing fresh fruit and vegetables (United Nations University 2009). Access to safe and healthy food may be an everyday event for some, but not all members of our community are so fortunate and it is the responsibility of the people to make sure everyone not only survives but in a healthy not hungry state.

Not everyone realizes how far reaching the effects of hunger and malnutrition can be. Yet hunger will eventually permeate every aspect of a persons' life. Not knowing when the next meal will be or what it will be produces stress from worry and anxiety. Pressures build from family and social interactions, which are always pervaded by the undercurrent of hunger. Feelings of deprivation and alienation only compound an already difficult circumstance (Habicht et al., 2004).

According to data gathered by the New York Times, 9.5 percent of Middlesex County residents earn less than 125 percent of the federal poverty level (2009). This means that slightly less than 80 thousand people live near or under the FPL in Middlesex County alone! In January of 2011 the United States Department of Health and Human Services reported the FPL to be 22,350 dollars for a family of four (2011). Analyzed on a person-by-person basis, more than eighty thousand county residents are living off of less than 7 thousand dollars a year. Making ends meet with such money is difficult in any region of the country, but especially considering New Jersey's high taxes and other elevated costs of living.

Another factor to consider is the large illegal immigrant population living in central New Jersey. These are people often overlooked in statistical research and census data because of the difficulty and controversy surrounding the gathering of this information. This type of oversight can artificially deflate needs-based services because of a simple lack of knowledge. Though it is hard to quantify this population because of nominal research and the inherent dangers posed by such inquiries, there is also a need among this community that can be satisfied with the work of neighbors.

Contemporary Causes of Hunger and Food Waste (RU)

There are over 6 billion people in this world, of which 4 billion live in poverty or on the borderline of poverty. About a billion people are starving even though there is enough food produced to feed about 12 billion people. Hunger and poverty in underprivileged countries is evident; however, people fail to notice that hunger and food waste even occurs in the rich countries of the world. The United States, one of the richest countries in the world, wastes about 100 billion pounds of food every year and also has millions of people living with no food. There has been a dramatic increase in hunger and food waste in the United States in the last three years, 2008, 2009, and 2010. Hunger and food waste are two very important issues which people are aware of; however, very little action is taken by the country as a whole to reduce this problem.

There are many causes of hunger in the United States; three of the most important are poverty, unemployment, and rising costs of living expenses.

One of the main causes of hunger in the United States today is poverty. Poverty has been the prominent cause of hunger for years now and still is. Poverty is defined as the lack of the minimum food and shelter necessary for maintaining life. According to the US Census Bureau, 37 million people suffered from poverty in 2007, 39.8 in 2008, and 43.6 in 2009. These numbers show that poverty has been increasing; the nation's official poverty rate in 2009 was 14.3 percent and continues to increase. Poverty in the United States is primarily caused by people's lack of resources, an unequal distribution of income, unemployment, cultural inequality, and lack of education. Individuals in the United States living in extreme rural areas do not have the same resources and opportunities as individuals in more advanced areas. This lack of resources can cause poverty and eventually lead to hunger. It is also evident that this county has an unequal distribution of income and wealth. The rich people in this country are extremely rich and the poor are extremely poor. Unfortunately, as the rich keep getting richer, the poor continue to live in poverty. Racial and cultural differences also cause poverty. The poverty rates among Hispanic people and African Americans are the highest. Lastly, lack of education is also a reason for poverty; high school dropouts earn the least amount of money. These causes of poverty cause hunger in the United States. People suffering from poverty have very little money and almost no income to buy food.

Unemployment is one of the primary causes of hunger in the United States. The U.S Census Bureau states that only 2.5% of the total full-time employed people in the United States suffer from poverty. Due to the recent economic crisis, many individuals and families in this country are without jobs. These lacks of jobs have caused many families to suffer from poverty and a lack of food. Based on the findings reported in *Hunger in America 2010*, one in eight Americans are receiving emergency food assistance through the Feeding America Network. The research done by *Hunger in America* shows the connection between a weak economy and increased needs for food assistance. People who receive the assistance have household incomes below the federal poverty line and in many cases they are unemployed. These findings show the impact unemployment has on hunger. There are also many other organizations that provide food to families that are not included in *Hunger of America*. Also, there are families who exist that do not even receive help but should. Therefore, there are many more unemployed people who suffer from hunger in this country.

Lastly, due to the weak economy, there has been a tremendous increase in living expenses. Most people in this country can hardly afford these expenses with the income they receive. This causes most people to pick spending more money on living expenses than food. Ultimately, this results in hunger and malnutrition. There are many causes of hunger in this country which is extremely ironic because this country produces more than enough food to feed everyone. This country does not only consist of people who are hungry and do not have food but also consists of people who throw away pounds of food on a daily basis. Supermarkets, restaurants, local stores, fast-food chains, school dining halls, and many other places throw away perfectly good food on a daily basis. An average American wastes about 1.5 pounds of food every day. An average business, supermarket, or restaurant owner throws away much more food then this on a daily basis. The cause of food waste basically occurs because there are not enough organizations and

people who take initiative to have food that is not needed at businesses given to people in great need of food. If more people took initiative then such high amounts of food waste would not occur and also there would be less hungry people in this country.

Contemporary Consequences of Hunger and Food Waste (HA)

Despite food waste and hunger being a global issue, it is given little attention by many people around the world. What our own community doesn't realize is that malnutrition is just as big of an issue in the United States. Even though our country portrays itself as one of the strongest economies in the world, hungry people fill the streets of our wealthiest cities. New York City, Philadelphia, Detroit, San Francisco, and even the capital of our county, Washington D.C. are some prime examples of areas displaying this hunger issue. In addition to malnourished individuals roaming our streets, we also have to take note on the contemporary consequences it has on the individuals themselves and the American society.

A poor diet increases health risks for woman during pregnancy and childbirth causing about 600,000 women per year to die from this problem. Miscarriage, abortion, and stillbirth are other things that arise more often because of the insufficient nutrients given to the female body during this time. A woman's nutritional needs are extremely important during pregnancy since more food is necessary for the fertilized egg and growing baby. Iron, is a very good example of a mineral necessary so a mother or the baby do not build up anemia, an iron deficiency disease that weakens individuals from performing daily routines. Babies born with a less than average weight are always more at risk but even when survival does exist, the children grow up with a weaker immune system making them more vulnerable to diseases and infection. Food insecure children under the age of 3 were 33% more likely to be hospitalized than those with a normal diet.

The immune system is a key factor in protecting the human body from toxins or foreign organisms. Malnourished people are more at risk of obtaining an infection or disease that may eventually cause them death. When the body is malnourished, the immune system does not receive the proper nutrients to function properly. The skin's ability to resist invasion by foreign organisms, the acid secretion produced by the stomach necessary to resist foreign objects, and the production of chemical compounds in the blood that destroy toxins become less effective over time. Another problem that arises from a weak immune system is a decrease in the production of antibodies which are very important in the destruction of dangerous organisms to the body.

Failure to grow and low weight are other consequences of malnutrition and it shows when these individuals are 60-80% lower than the average median of those in the same age category. Common signs of malnourishment include wrinkled skin, no body fat, absent muscle tone, and visible bones. Intellectual development is also a problem that stems from growth faltering. Various studies have shown that the I.Q. of people that don't eat properly, score lower than those living on a healthy diet. As a result of having a low I.Q., these individuals also average less time in education than others. When a person is poorly educated, heavy labor is normally considered as the solution to the problem. However, studies done in Bangladesh and India have shown that malnourishment has decreased the gross national production output because people are too disabled to perform daily employment activities.

Once again, although we live in a wealthy nation, over 13 million children live somewhere with limited or insufficient amounts of food. The majority of these children are white but it is more noticeable in certain groups of children (30% of black and Hispanics). Recent studies have shown that children affected from hunger are more likely to experience psychological issues and have higher levels of anxiety, irritability, hyperactivity, and aggressive behaviors. These children are also more vulnerable to emotional distress making them more likely to have fewer friends since they have difficulty getting along with others. Children with emotional distress issues tend to be associated more with depression and suicidal incidents. Due to the psychological and emotional distress, most of these children as students are receiving special education classes along with counseling services because of past or current history of mental health problems. Other things to observe in these children as students are that they are more likely to be tardy or absent frequently from school. In addition, these students are also twice more likely to get suspended from school and have to repeat a grade.

Cutting down on food waste is one of the easier things that can be done to help the environment we live in and save money. According to the United States Bureau, more than 43.6 million people live below the poverty line in America already and with food index prices still rising, thousands more are being pushed in this direction. Surveys show that more than 350 billion pounds of food are available every year but approximately a little over 100 billion pounds are lost by retailers, consumers, and restaurants. Americans throw a quarter to one half of their food away costing the country over 1 billion dollars just to dispose of it as garbage. Food waste, the 3rd largest contributor to the American garbage is not only costly but it also puts people in the country at risk because of unsafe greenhouse emissions. In order to completely dispose of garbage, tons of methane (a greenhouse gas more powerful than carbon dioxide) must be dispersed into the environment.

Food waste and hunger in the United States is an issue that extends beyond the nutritional boundaries of the malnourished individual and into other crucial areas. Education, public health, medicine, the environment, and the economy suffer drastically from these individuals. Approximately 92 billion dollars are spent every year on food waste and hunger related problems. Malnourished children show through evidence from recent studies that they lack in knowledge and brain power which results in lost productivity of the nation. Food waste and hunger is not just an issue for the individuals roaming hungry through the streets of New Brunswick or New Jersey. It has turned into an issue for the United States of America. Working together and by everyone contributing with the slightest help could turn a huge problem around into the positive direction.

Small Scale Social Movements (KMO)

There are also some constantly growing social movements that have been born from the disdain many people have for the consistent wasteful practices of restaurants, grocery stores, and other food producers and distributors. These movements focus less on advocating for change in wasteful practices undertaken by the food distribution system in place in the United States, but on benefiting from the consumable products being discarded, and spreading those benefits to their friends and family.

The first movement, known as dumpster diving, is defined not just by participation in wasted food, but in the waste stream in general. Participants, known as "dumpster divers", search through, or often times quite literally dive into dumpsters in public places or behind places of business. These individuals seek to locate businesses that throw out food that, while it may not live up to the seemingly ridiculous standards held by the business, it is still perfectly good to eat. Food items that fit this category include: fruits and vegetables that are still considered fresh, but that have minor bruises or other defects that may make them undesirable to the consumer; frozen meats and other foods that have been sitting in the freezer for a long time, and even though they are perfectly safe to eat, the store may think that the food has gone unsold for too long, or they may receive a new shipment of that item that they consider "newer"; breads and other bakery items that expire that day, and that are still virtually as fresh as when they were baked; meats whose sell by dates are either that day, or the following day, which can be subsequently frozen and be given an infinitely long shelf life. These nearly expired meats offer often overlooked benefits to individuals who can stock up on plenty of free meat, and offer even more significant benefits to soup kitchens, who often have formidable high-capacity freezing capabilities to preserve large amounts of food indefinitely.

Many individuals who take part in the dumpster diving phenomenon do so not because they are living in acute poverty, but because they don't see the need to walk into a store and spend money on food that they could get free of charge in the store's dumpster, while simultaneously reducing input into our already massive waste stream. Dumpster divers have also been known to form informal "diving" communities, in which large finds of one kind of item are shared, so that overall variety of food gained by each person is greatest. This community of dumpster diving is featured in the 2010 film "Dive!", in which dumpster divers not only share the spoils of their diving, but even come together to cook gourmet meals out of the free food they have acquired. Often times, people who have lower incomes find that they can acquire even higher quality food items in a dumpster than they could afford in a grocery store. This becomes a blessing for young parents who want to keep their children well-nourished, but may not have the income to do so typically.

The legality of dumpster diving is something that tends to be a grey area, with a great deal of confusion surrounding the various circumstances in which it may or may not be legal. California V. Greenwood, a case that went all the way to the Supreme Court, decided that there is no reasonable expectation of privacy for discarded materials. What this means is that items discarded by a private citizen or a business into the public domain, cannot be expected to continue to be the property of that individual or business, nor can private information contained therein be expected to remain private. Many states and municipalities, have however, made it a priority to ban the act of dumpster diving. One such state is Connecticut, in which a bill called "An Act Concerning Dumpster Diving" was passed. The stated purpose of this bill did not concern the practice of dumpster diving for food, but was born out of the fear of lawmakers that businesses located in their state would resort to the cutthroat action of using information found in one another's trash to use it against one another. While the intent was to prevent unethical business competition, it actively made any form of dumpster diving illegal, which represents a total lack of concern for individuals who are simply seeking to eat food that would otherwise end up in landfill. Also, it should be noted that even if there are no laws specifically prohibiting dumpster diving in a state or municipality, it is up to the interpretation of law enforcement and

the justice system in that area as to how to handle dumpster divers. In many places, the police may simply let it happen, or may request that the individuals dumpster diving discontinue the practice.

However, in some extreme cases, dumpster divers could face jail time. Two men plead guilty to misdemeanor trespass and were sentenced to six months of jail time in Steamboat Springs Colorado, after being arrested for dumpster diving expired fruits and vegetables at a produce store. The prosecutor in the town wanted to make an example of the men, and even though the owner of the store itself said that he did not support the charges being leveled against the men, the district attorney insisted that they be prosecuted to the fullest extent of the law. The men could have refused a plea deal, and attempted to fight their case in court, which could have resulted in either exoneration, or a felony conviction and years of jail time. This case represents the unpredictable nature of the justice system and its working throughout our nation.

While the legality of the social movements involving removal of food from the waste stream is certainly questionable, the reasons for this appear to be largely technical. Additionally, one would find the challenge of attacking the morality of keeping perfectly edible food from going into a garbage dump nearly impossible.

Good Samaritan Law and How Local Businesses Can Help (RA)

Millions of people around the world are suffering from starvation, not knowing when or where their next meal will come from. Fortunately for many of us this is not a problem. Therefore many restaurants and grocery stores have decided to join forces with organization such as City Harvest to donate leftover food. To explain further, City Harvest is a an organization that has set up a community wide effort with restaurants, grocers, cooperate cafeterias, manufacturers, and farms to deliver food, that would otherwise be thrown away, to feed hundreds of hungry New Yorkers. To this date, they have collected over 300 million pounds of food since their inception 25 years ago. Not only that, but City Harvest also strives to ensure that the food they are collecting is nutrient-rich and from all aspects of the food pyramid. These items include canned tuna, salmon, fresh and shelf stable milk, yogurt, cheese, fresh produce such as apples, squash green peppers, lettuce greens, and whole wheat breads- a variety of meat, dairy, fruits, vegetables, and whole grains.

City Harvest's job has been made easier in their accomplishment of signing on over 75 food industries for food donation to the over 1.5 million New Yorkers in need and it was signed on October 1, 1996. On that day, President Bill Clinton signed The Federal Bill Emerson Good Samaritan Food Act. The purpose of this act was to encourage food and grocery donation to non-profit organizations for those in need. The benefit of this law is that it protects the donator from any liability as long as the donation was of a "healthy" product made with good intent. This law also serves to encourage local food providers to donate their unwanted food to the hungry, in a small worldwide effort to decrease hunger. In further detail of this law, the product that is donated must meet the quality and labeling standards held at the federal, state, and local levels. The food must also be intended for human consumption, whether it is raw, cooked, or even a beverage.

Panera Bread is a franchise that began a food donating program. It began in 1992 and is entitled the Day-End Dough-Nation Program. What it entails is packaging of unsold bakery items from the day's end which is donated to local food banks and charities. In 2008, the program donated over 50 million dollars worth of unsold bakery items to non-profitable organizations. This should be strongly encouraging to other franchises to begin doing the same and hopefully in the near future we will see more of these programs erupting.

Similar organizations to Panera Bread's exist. One such organization is called Feeding America. It is in its thirtieth year of success through recieving donations from farms, grocery stores, and even government agencies and donating them to over 25 million people across the country via 200 food banks. Another organization, known as Replate, was founded in San Francisco by two activists named Josh Kamler and Axel Albin. They began by taking food from the top of trash cans and donating it, after cleaning up the food and making sure it was safe to eat. Another similar organization called Rock and Wrap It Up, started in 1990, adds a spin on things. Instead of picking up food from trashcans, Rock and Wrap it up collects food from sporting events, political rallies, and concerts. They have worked in over 500 cities thus far collecting the leftover items.

Although these organizations have formally stablished themselves as emergency food save programs, other organizations attempt to do the same, but at more local levels. Since franchises such as Subway and Dunkin Donuts do not have programs set up at the corporate level, local buisness owners feel the right and oppurtunity in locally donating their leftover foods. To be more specific, a Subway restaurant in Branchburg, New Jersey has agreed to donate its leftover bread, chips, apples, beverages, and cookies to local charities. In addition, Dunkin Donuts has offered to donate their bagels, donuts, and even coffee to those apart of these charities in order to help. If it wasn't for President Bill Clinton's Good Samaritan Act of 1996, all of these organizations and local franchises would probably not have decided to donate their food due to the high risks that may be involved with sickness occurring upon consumption, etc, that would of left many potentially hunger stricken and well deserving people at large. This would be a huge injustice in our society being that these organizations are well suited to provide these services but would not have been able to without this law. Being that is it in place, hopefully one day hunger as a whole would be eradicated worldwide- if not worldwide, at least locally in one's own town. Get involved.

Ending Hunger Through Non-Profit Organizations (PV)

Empowering Lives Inviting Justice Alleviating Hunger, this is their promise. Elijah's Promise was founded with this acronym and is living up to its namesake. They have been working with the local New Brunswick community to better the lives of those involved. Elijah's Promise is a small non-profit that works on the small town level. They have a couple of different programs at their facility. They recruit local homeless people to receive training in their kitchen in hopes of landing them a permanent job at a local hotel or restaurant. While they are giving these individuals this on the job training, they are hosting dinners and fundraisers and exposing them to these types of high volume events that they will encounter later on in their career path. They have been tackling the hunger issue on a local level for many years. They run a soup kitchen to feed those in need, especially in the cold winter months. They also partner with local chefs and restaurants for many of their larger events. Because they are in the same town as Rutgers

University, they have partnered with their hunger group, Rutgers Against Hunger (RAH). RAH has been active at the University and local level for many years. Together they take on the very real hunger issue that presents itself in the local community. By enlisting the help of faculty, staff, students, and local volunteers, the program has grown and helps hundreds of NJ families combat their hunger issues. By hosting events such as food drives, volunteering at food banks, serving at soup kitchens, or hosting a family in need, RAH is making a difference, not only in the local New Brunswick community, but also in the state of New Jersey. RAH also offers unique opportunities for families to call on help at the grocery store. A RAH representative can help a family save money by teaching them how to shop smarter at the store by reducing their bill and at the same time increasing the nutritional value of the foods they purchase.

Share Our Strength is a national organization that partners celebrity chefs and food industry professionals with local efforts in the fight against childhood hunger. SOS has positioned itself to work with the "star-power" that comes with celebrity chefs and well-known brands such as The Food Network, Food & Wine, All-Clad, Cutco, etc. Together with the notoriety in the food industry and the local volunteers that facilitate the many events and donations, SOS has become a premier non-profit in the hunger category. Their food focused fund raisers "engage and raise millions." Food events are the cornerstone of Share Our Strength's fundraising efforts. Each year, they engage millions of people across America in Share Our Strength's solution to childhood hunger. All of them raise funds to support Share Our Strength's No Kid Hungry Campaign to end childhood hunger in America by 2015. The campaign provides leadership, raises awareness and advocates for change that will make sure no kid in America ever goes hungry. Locally, these funds help Share Our Strength build partnerships that bring together public officials, nonprofits, community and faith-based groups, private funds and businesses to develop a measurable plan that will end childhood hunger in a particular state or city. Through No Kid Hungry, Share Our Strength also funds the most effective anti-hunger organizations in their work to connect families with the nutritious food they need. Together, these partnerships and local grants accomplish many goals. They begin the day by giving more kids a healthy start to the day by supporting effective school breakfast programs. They assist families by ensuring kids have food at home by helping more eligible families enroll in the Supplemental Nutrition Assistance Program (food stamps). They keep kids fed outside of school hours by improving access to after-school programs that provide snacks or meals, and increasing participation in summer meals programs. They even teach low-income families how to cook healthy, affordable meals through their Cooking MattersTM program and by funding other nutrition education programs.

On a global scale, Slow Food is working to combat hunger as well as many other food related issues. Slow Food was founded in 1986 when Carlo Petrini and his buddies noticed an alarming trend in Italian culture. The American fast food mindset had infiltrated his beloved country and especially its most sacred city of Rome. With all of the food traditions present in Italy, few are as documented as those found in the eternal city of Rome. To preserve these practices and traditions, Carlo started an awareness movement, beginning in his country and eventually branching his ideas out to nations across the world. The awareness was all about food. Making food, more accessible, more natural, and most important, more pleasurable. Since then, his food movement, called Slow Food (the opposite of fast food), has taken form in farmers' markets, farm to table restaurants, and most importantly in school systems. Over the years the Slow Food organization has dealt with the issue of world hunger with a unique approach. If people can learn

how to grow their own food, help local farms, and/or cook for themselves, then less people in the country would go hungry. Instead of holding huge fundraisers to throw at a problem, Slow Food is trying to work on hunger issues from the ground up, a unique approach for a non-profit. Slow Food continues to host gatherings of people from around the globe to discuss the issues surrounding the world's food system. These people are the ones working in their local communities with their local farmers and food providers to help open up the access of food to everyone.

The Service Project: Establishing Organization

For our service project, we thought it would be a great idea to set up a City Harvest like organization right here in New Brunswick. We began by contacting different businesses and organizations like Panera Bread, Subway, and Dunkin Donuts. Panera Bread, located on Route 1 in North Brunswick, seemed very interested. They have a program called Day-End Dough-Nation in which unsold bakery products are packaged at the end of the day and donated to local food banks. Since 2008, they have collectively donated 50 million dollars worth of baked goods to various charity organizations (http://www.panerabread.com/about/community/). We hoped to add Elijah's Promise to their list. Elijah's Promise is a soup kitchen located in New Brunswick. We spoke to Tony Nunno, the volunteer coordinator at Elijah's Promise, who was delighted with our idea and willing to take any donations.

In addition to Panera Bread, Subway located in Branchburg, New Jersey and Dunkin Donuts in Basking Ridge, New Jersey told us they were ready to give food for donations any time we were ready to pick it up. Panera Bread however, required a more detailed process which we were told would take about four weeks. We submitted an application for approval to Panera Bread and are still waiting for an answer. We have contacted Panera Bread a few times regarding the status of our application but were told it is still in process. We will contact them again this week about our application with the hope that it has been approved. On the other hand, we have had plenty of food donated from Subway and Dunkin Donuts. We discussed with Tony Nunno that we would, as a group, donate food twice a week. Therefore, we drove to the Subway and Dunkin Donut locations and picked up their leftover food. Subway generously donated a lot of leftover bread, apples, and chips. Dunkin Donuts generously gave us numerous bagels and donuts. If this food was not given to us for donation then it would have been thrown out and gone to complete waste.

We were told that we are allowed to drop off the food to Elijah's Promise two times a day before lunchtime and dinnertime Mondays through Friday. We have dropped off the food a few times and will continue to do so. Tony Nunno and the other workers at Elijah's Promise were very grateful for the donated food each time we went. Food inspection generally oversees bread products, which was convenient for us being that much of our items were bread products. Therefore, Elijah's Promise was able to take all the food we had to donate. The purpose of this service project is to give back to the community. The amount of food that is wasted on a daily basis and thrown out is not hard to miss. Businesses, restaurants, homes, schools, and basically any other place that serves food, wastes food. While the number of food that is wasted increases, the number of people that are hungry and do not have money to afford food has also increased. To decrease this waste of food, we decided to try to do something to change it and hopefully be the cause for others to change also. This project does not only help us feel good as human beings

but is also helping the community by decreasing the wastage of food and giving food to hundreds of hungry people. There are way too many people in this country who unfortunately do not know where their next meal is coming from. As a group, we hope to help these people in any way possible and we hope our service project does this and causes others to help these people as well. Finally, we are students who cannot continue this project when we graduate and leave the area. We feel, however, that this project is worthy of continuation, and would like to see future student groups maintain the connections that we have established.

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Editorials

Editorial (Aaron Oberstein)

Hunger and food hardship are serious concerns which lead to a myriad of health issues and diseases arising from malnutrition. Hunger and food hardship are often considered Third World problems that we in the United States, as a First World nation, do not endure. According to research presented to the Food Research and Action Center, the United States is no exception. This global issue lives closer to home than many people think and can be found in our cities and on our streets. To be a cohesive community means helping those in need. Considering the overabundance of food and the considerable food waste in our society, the hunger of our friends and community members is unacceptable.

The Economic Research Center, a subgroup of the United States Department of Agriculture, has been conducting thorough research on hunger and food insecurities in the United States since 1995. Each year they compile statistics concerning food insecurities in the United States and their detailed reports enable social science scholars and other social scientists to better analyze at risk populations to identify potential solutions to this harrowing problem. In their most recent report released in 2009, the ERS claimed, "85 percent of U.S. households were food secure throughout the entire year and at least 14.7 percent of households were food insecure at least some time during that year." This is the highest percentage reported since the inception of data collection in 1995. According to the latest United States census data, released April 1, 2010, the resident population of the United States was over 308 million. This means that in 2009 more than 45 million men, women, and children in the U.S. faced food insecurities at some point during that year, a staggering and almost unbelievable number.

The USDA defines food insecurities in two categories, low and high, with the latter and more severe categorization including some degree of hunger. The former refers to reports by individuals of, "reduced quality, variety, or desirability of diet with little or no indication of reduced food intake". High food insecurities include, "reports of multiple indications of disrupted eating patterns and reduced food intake". These may not seem like stark or dire

definitions but I believe the severity inherent in hunger is powerful enough. Having to spend a day, a night, or any amount of time suffering from hunger should be a rectifiable problem within our modern society, and I believe there are many tangible solutions if we are willing to search in the right places to come together as a community.

According to data gathered by the New York Times, 9.5 percent of Middlesex County residents earn less than 125 percent of the federal poverty level. This means that slightly less than 80 thousand people live near or under the FPL in Middlesex County alone! In January of 2011 the United States Department of Health and Human Services reported the FPL to be 22,350 dollars for a family of four. If we take this on a person-by-person basis, more than eighty thousand county residents are living off of less than 7 thousand dollars a year. Making ends meet with such money is difficult in any part of the country, but especially considering New Jersey's high taxes and other elevated costs of living.

Editorial

United Against Hunger? (Raahi Upadhyay)

The United States of America is one of the richest countries of the world but it too suffers from hunger and food waste. The people in this country waste about 100 billion pounds of food every year and this number continues to increase. People understand that food should not be wasted but very little action is taken to change the circumstances. Supermarkets, restaurants, local stores, fast-food chains, school dining halls, and many other places throw away perfectly good food on a daily basis. As a student at Rutgers University, I have seen pounds and pounds of food being thrown out at the dining halls and campus centers. An average American wastes about 1.5 pounds of food every day. An average business, supermarket, or restaurant owner throws away much more food then this on a daily basis. The cause of food waste basically occurs because there are not enough organizations and people who take initiative to do anything about this problem. The organizations that have taken initiative have helped thousands of people and continue to do so. City Harvest, an organization in New York has set up a community wide effort and has gotten together restaurants, grocery stores, cafeterias, manufacturers, and farms to deliver food that would have gone to waste to hungry New Yorkers. They began this 25 years ago and have collected over 300 million pounds of food since. A collection of one billion pounds of food would occur easily if other states began to do this very same thing. An organization such as City Harvest should be put into effect in every state of the United States. This would not only decrease the wasting of food but also decrease the number of hungry people which would decrease malnutrition, starvation, diseases, and death. Many businesses and supermarkets fear the idea of donating their food because they are not sure if this would be legal or allowed. These people need to realize and become aware of the fact that on October 1, 1996, President Bill Clinton signed The Federal Bill Emerson Good Samaritan Food Act. This law was put in to effect to encourage supermarkets and grocery stores to donate food to non-profit organizations for distribution to those in need. This law protects the donator-a person, gleaner, or non-profit organization- from liability for a donation of a fit product made with food faith. The ignorance of the businesses and their fear of something happening because of their food has become a problem in trying to reduce the problem of hunger. Not all businesses have overlooked this law. For instance, Panera Bread has begun a food donating program called the Day-End Dough Nation Program. Through this program, Panera Bread packages unsold bakery items

at the end of the day to local food banks and charities. A lot of the Panera Breads take part in this but not all. Other businesses such as Dunkin Donuts, Seven Eleven, and Subway are willing to donate their food at the end of the business day but are looking for people to distribute the food to those in need. A few other students and I have decided to take initiative and to decrease the problem of hunger in New Brunswick, New Jersey. We have contacted Panera Bread, Subway, Dunkin Donuts, Seven Eleven, and Chipotle and are trying to set up a system to distribute their unneeded food to people in need, local charities, and organizations such as Elijah's Promise. This will help thousands of people in New Brunswick and also decrease the food that was being wasted at the businesses. We have taken a step in New Brunswick to reduce this problem, if other people in other cities and states do the same then the problem could be reduced tremendously. A little step towards the right direction could cause a big impact and maybe at the end we all just might be united against hunger.

Editorial (Hans Alonso)

Four billion people out of a total of six billion people worldwide live in poverty or on the borderline of poverty. Approximately a billion of these people are starving from hunger even though there is food produced to feed almost 12 billion people. What our community doesn't realize is that malnutrition is just as big of an issue in the United States. Even though our country portrays itself as one of the strongest economies in the world, hungry people fill the streets of our wealthiest cities. New York City, Philadelphia, Detroit, San Francisco, and even the capital of our county, Washington D.C., are some prime examples of areas displaying this hunger issue. What our society is unaware of is that the average American wastes about 1.5 pounds of food DAILY! Surveys show that more than 350 billion pounds of food are available every year but approximately a little over 100 billion pounds are lost by retailers, consumers, and restaurants.

There are many causes of hunger in the United States but three of the most important ones have to do with: poverty, unemployment, and the rising costs of living expenses. According to the U.S. Census Bureau, 37 million, 39.8 million, and 43.6 million people suffered from poverty in the years 2008, 2009, 2010 respectively. This data shows that just in the past three years poverty has been increasing dramatically. Due to our economic troubles, living expenses and unemployment has gone up. What everyone doesn't understand is that poverty, living expenses, and unemployment correlate with each other a lot since high living expenses for those unemployed causes them poverty. In the end, these people due to the poverty they are living in spend more money on living expenses and less on food increasing their chances of malnutrition.

In addition to malnourished individuals roaming our streets, we also have to take note on the consequences it has on the individuals themselves and the American society. First off, malnourished people are more at risk of obtaining an infection or disease that may eventually cause them death. When the body is malnourished, the immune system does not receive the proper nutrients to function properly. Failure to grow and low weight are other consequences of malnutrition and it shows when these individuals are 60-80% lower than the average median of those in the same age category. You may ask yourself, why is this even considered as a problem? Well, intellectual development stems from growth faltering, and in the end, these two factors disable individuals to perform daily employment activities because of physical and

mental setbacks. Studies done in Bangladesh and India have shown that malnourishment has decreased the gross national production output. Our suffering economy for the past recent years could be because of the lost productivity in our nation. Finally, Americans throw a quarter to one half of their food away costing the country over 1 billion dollars just to dispose of it as garbage. Food waste, the 3rd largest contributor to the American garbage is not only costly but it also puts people in the country at risk because of unsafe greenhouse emissions. In order to completely dispose of garbage, tons of methane (a Greenhouse gas more powerful than carbon dioxide) must be dispersed into the environment exposing our society to danger. Food waste and hunger in the United States is an issue that extends beyond the nutritional boundaries of the malnourished individual and into other crucial areas. Education, public health, medicine, the environment, and the economy suffer drastically from these individuals. Food waste and hunger is not just an issue for the individuals roaming hungry through the streets of our state or world. It has turned into an issue for the United States of America. Working together and by everyone contributing with the slightest help could turn a huge problem around into the positive direction. So next time, you face this issue completing your daily routines, think about these facts and take the initiative necessary to make our country a better place. Lend a hand and help the individuals suffering from hunger! For their health and for us as a whole!

Editorial

Local Buisnesses and How They Can Help Solve Hunger (Rati Anand)

Currently in the United States, over 49.1 million people suffer due to food shortages. Of that 49.1 million, 16.7 million are children. This can cause huge problems in the growth and development of these individuals. Therefore, it is highly necessary to implement nationwide food programs to help with this problem. In 1996, President Bill Clinton passed the Good Samaritan Act. This law stated that no person would be held responsible in the event of illness, etc caused by a food donation made with good faith. Since then, various supermarkets, restaurants and farmer's markets have aided in the fight against hunger by donating leftover items. A few of the organizations that work with these places are City Harvest of New York City and Feeding America.

City Harvest of New York City began 25 years ago by people who wanted to help those in need. The volunteers at City Harvest collect food items from various grocers and restaurants. These items would normally be thrown away yet are perfectly safe for human consumption and health. To expand on the idea that City Harvest has set, a group of students from Rutgers University set out to do the same in their town of New Brunswick, NJ. This group began by contacting a local Subway and Dunkin Donuts and asking if they could receive the end of the day items such as bread, donuts, bagels and muffins. They then decided to pass this food along to Elijah's Promise is a soup kitchen catering to the New Brunswick area.

The group hopes that this service will continue well into the future. In addition, it hopes that it can expand and allow other buisnesses in the area and in the towns nearby to get involved with their local soup kitchens. In this way, millions and millions of pounds of food can be saved a year and be put towards feeding the 49.1 million people who starve a year. This can turn the country around by enabling people to become more active. They will be more active because they will become healthier and be able to contribute to society much easier.

I hope that the readers of this article (NJ Biz) will contact their local buisnesses and get involved. Or if anyone is the owner of a food buisness or knows anyone who is should contact their local soup kitchen or homeless shelter and get involved. You can make a difference!

Editorial

Our Food: Waste Not, Want Not (Paul Valetutti)

350 lbs. of food will be available in the U.S. to consume this year, 28% of that will be wasted. The average American wastes approximately ½ lb. of food each day. In the retail market, an average of \$44 billion is wasted each year. To dispose of this food waste, America spends about \$1 billion per year. Almost all (98%) of the 30 million tons of food waste ends up in landfills. These numbers are staggering, but not as eye opening as the following: 9.6 million U.S. residents experience hunger. Why are so many going to sleep hunger when there is so much food being thrown away? It is time to reverse this trend. If we can throw out 30 million tons of food a year, then we figure out how to feed those who are hungry.

Food is thrown out for many reasons including: spoilage, past its marked due date, discolored and unattractive, slight imperfection, etc. Bread is discarded simply because it is a day old. Fruit might be tossed to the curb merely because one apple or orange is bad in the entire case. This happens every day and can be witnessed in and/or around the rear of grocery stores, supermarkets, and even small restaurants. For a bigger cooperation, they can just mark it off as a loss or spillage and usually get reimbursed or insurance coverage. For a small operation, such as a "mom and pop" restaurant, that is money down the tube, literally! For those who frequent those reality TV celebrity chef shows, waste is a big issue. For example, Chef Gordon Ramsey's show Kitchen Nightmares frequently highlights him walking into a restaurant kitchen and going straight for the waste basket. He is looking to see what profits are being thrown away. One would think that this is simple business and economics class. So then why is America wasting \$44 billion of food a year?

The saddest part about the waste is not the food itself. It is the simple fact that there are people, and a lot at that, that are hungry. If only 5% of America's waste was saved, almost all of those hungry U.S. residents could be fed. As simple as that sounds it is a tremendous task to undertake. This means creating a sense of community; companies, families, businesses, and people coming together to help each other with a basic need, food. It starts at home, plan out meals and utilize all leftovers. This practice will lessen the waste not only at home, but this type of cooking/eating will trickle into the practices that the food stores follow. These stores will also need to help due to buying power and their hefty amounts of waste. These stores could partner with local organizations to make good use of food that is no longer fit for its shelves, but still very edible.

Plan before you shop and shop the fridge before you shop the store. Ask questions, a lot of them, and put your local store to task. Are they being responsible with their waste? Do they have a donation program setup with a local organization? Let's be proactive instead of reactive, that's how things get done.

What Food Shortage? (Editorial by Kai Marshall-Otto)

Most are familiar with the idea of charity to the poor, and feeding the hungry in our society is a practice very few can disagree with. But where does that food come from?

We're all familiar with local food drives, and soup kitchens where a hungry person can go to get a hot meal. But that food is generally bought in a grocery store or purchased through donations from a food supplier. But what if hungry people had access to food from other sources, completely free? They easily could.

By some estimates, the United States wastes 30-50% of its food. This comes to about \$50 billion worth of food that is wasted (approximately the amount of money Republicans and Democrats are so fiercely arguing about for the 2011 budget this very moment). The vast majority of this food is disposed of because it is nearing its expiration date and the store doesn't see a financial benefit in freezing it, or because food items such as fruits and vegetables have small blemishes that make them unattractive to the consumer.

Now, the amount of people living in hunger in the United States in estimated to be around 15%. So what would happen if the 30-50% of our food supply that is being put in the dump every day? It seems self-explanatory that hunger in our country would be effectively eliminated.

The problem is that grocery stores and restaurants are profit-driven institutions, and anything that they fear may affect their profitability is extremely frightening to them. Many stores fear lawsuits and other charges that could result from accidentally donating bad food.

But they have no reason to fear!

Thanks to "The Bill Emerson Good Samaritan Food Donation Act" passed under President Clinton, businesses have significant protection from lawsuits when donating food. Many businesses either don't know about this law, or are afraid that the law does not protect them enough. I, however, believe that it does. The law protects businesses from both civil and criminal charges resulting from food donation, and the only stipulation is that the food is "apparently fit and wholesome". Now how hard can it be for food to appear fit? The answer is not that hard.

It is time for businesses with excess food to start donating it to those in need, both here in New Jersey and across the nation. It's time to stop wasting precious resources, and time to start helping those in desperate need of nutrition!