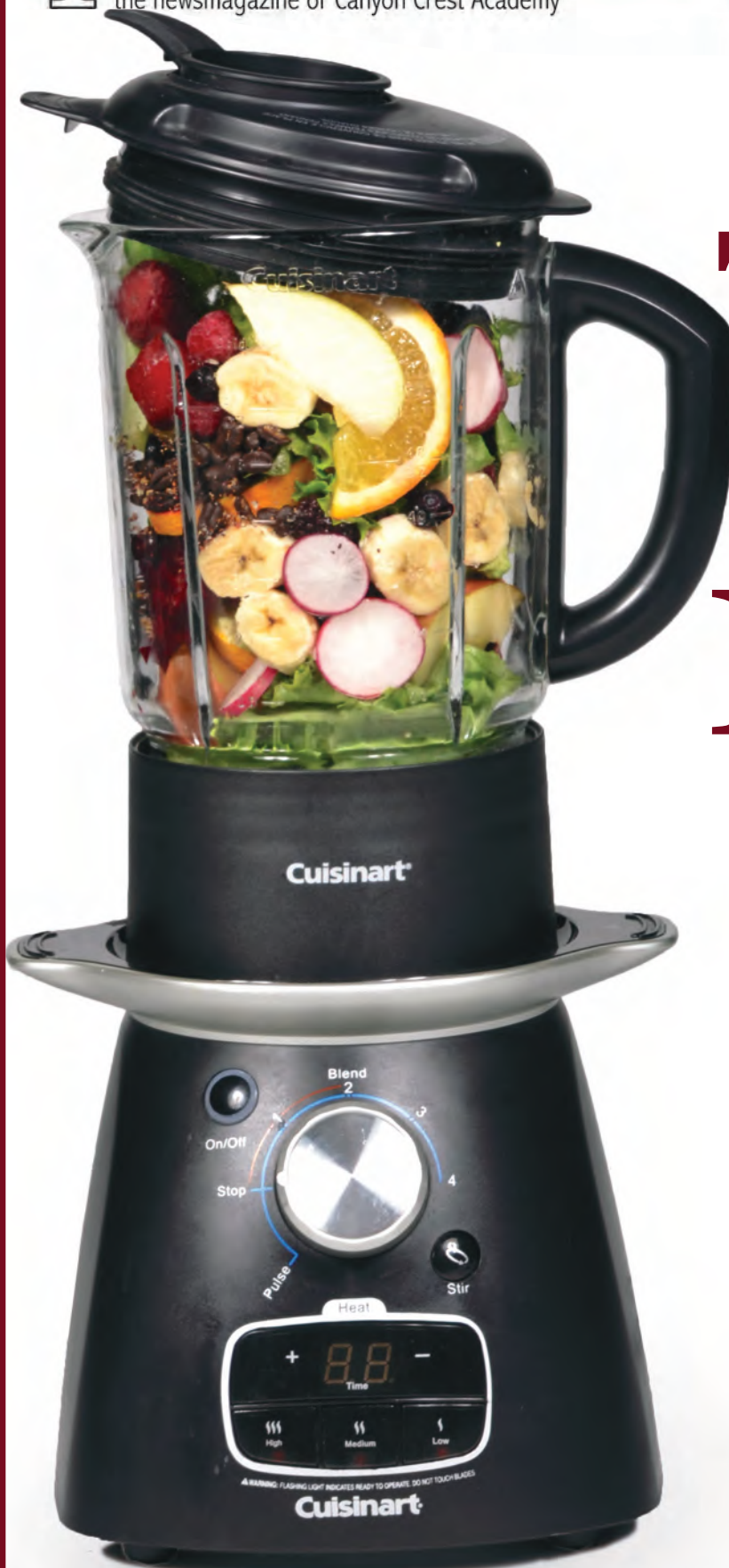


pulse

the newsmagazine of Canyon Crest Academy

Volume 9 Issue 2 February 2014



# The Food Issue.



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For dessert, scan the code  
below to head to Pulse  
Online!



The opinions expressed by the writers do not necessarily  
reflect those of Pulse Magazine, Canyon Crest Academy, or  
the San Dieguito Union High School District.



# Letter From the Head Chef

Hello Ravens,

For the first time in Pulse history, we would like to present you with the food issue. In this issue, Brian Chekal explores California's food stamp program with an experimental piece while Josh Dillen educates us about GMOs. Meanwhile, Georgie Lawson examines global food traditions and Alyssa Kucera uncovers how much food we waste in a week. We have included an article remembering the life of CCA freshman Justin Yung who passed away last month.

Best of luck with your spring semester,

Avery Naughton & Laura Fouquette

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# \$5 A Day

by Brian Chekal

Attending high school in an area such as ours, we are often trapped in a “Carmel Valley Bubble,” one that shields us from the realities of life and from all but the biggest of financial strains. Armed with a genuine curiosity, I decided to take a shot at living on food stamps. However, I quickly found that what I had initially intended to be an experiment was so much more: it was a true learning experience.

Truth be told, I was ill prepared for a sudden change of this magnitude. I knew next to nothing about this issue other than the fact that it seemed to be discussed during the campaigns of every national office seeker. In short, the Supplemental Nutrition Assistance Program is a part of the Department of Agriculture’s Food and Nutrition Service that works with state agencies to provide financial assistance and food to low income households: “to ensure that those eligible for nutrition assistance can make informed decisions... and can access benefits.” In California, those that fall below a certain threshold - 130% of the gross monthly income at the poverty line, or \$2552 for a family of 4 - can apply and if accepted, receive financial help every month in the form of an electronic debit card. Though there have been cases of fraud where people who did not meet the requirements were able to receive benefits, renewed interest after the last presidential election, when the program was widely criticized, has helped renew scrutiny. The website’s

description points out right away that “recipients must notify their local County Welfare Department about changes in their income or other circumstances” and that “such changes may affect their eligibility for benefits.” The program is called CalFresh, and it soon had another high school junior to figuratively count among its ranks. Because the monthly allowance scales from a base balance according to the number of people in your household, registering as a single

district’s efforts to help out. Currently, less than 10% of the 12,000 students in our district are on a free or reduced lunch program and only 3% of Canyon Crest’s student body. Despite the small population, the district has made efforts to accommodate all students, providing free breakfasts and lunches to many students, which provides nearly 2/3 of their recommended nutritional intake. A key feature of its program is using profits from cheap food such as grilled cheese paninis to help finance losses on some of the more expensive, such as burritos. This ability to use proceeds from one section of



individual household would have given me a disproportionate amount of money and I decided to take the \$632 allocated to each family of 4 and divide it instead. For this short experiment, I would have exactly \$35.68 to last me the week.

At the start of my social experiment, I planned to make all of my meals at home instead of buying them in an effort to save money, buying only the most basic things like bread, pasta, jam, peanut butter, etc... However, as the week progressed I found that it was much easier than I had initially anticipated. Acting as if I was on the free or reduced program, I was able to buy a combo meal every lunch with money that was exempt from the weekly \$35 allowance. Of course, the regime was still hard, and I quickly grew tired of the same pasta dinner every night, but I soon realized that there was still much to be said for our

the nutritional department to finance another is what allows the program to help finance free lunches largely out of its own pocket. Mr. Mariam, our district’s Director of Child Nutrition Services, states, “The budget for nutritional services last year total \$3 million, covering all 8 schools. Of this, only \$500,000 came from the state, allowing us to be only minimally affected by the types of potential cuts being discussed by the state, which are around 3% to 5%.” He goes on to say, “We operate here on a strictly break even basis, what students pay is used to finance what students eat.”

Though school breakfasts and lunches seemed to be resolved, I still had to work on creating myself dinner every night. Without thinking things through I had already bought all of my supplies for the week and was stuck with a monotonous routine, filled with seemingly endless mountains of red

pasta. By the time day 5 had rolled around, I never felt closer to Strega Nona. The harsh power of budgetary limitations on food seemed to be ever testing my resolve. Luckily for me, most people aren't using their checks

out the importance of its existence. With this program, many are able to supplement their income and live largely like the rest of us. You'd be hard pressed to find even the most experienced of workers being

130%, \$2552, 12,000 students, \$35. All these numbers added up to 21 meals, 10,080 minutes and 1 hungry journalist. Though we know the sum of these myriad of numbers, seeing the role each had individually is



as their only sets of income. Quin Patterson, a senior here on campus, has worked at multiple grocery stores and is currently employed by the Del Mar Vons. He claims that "Most of the people that I see shop [at Vons] are middle aged and buying produce or meats to make real meals for dinner. Not many people use them and relying on food stamps alone will only get you so far but those that do use them seem to be using it as a supplement to buy similar things as everyone else."

For me, attempting to rely solely on these food stamps was almost intolerable but even with that said it seems almost too obvious to point

able to pick out right away who is a beneficiary of this program and who's not just by looking at what they eat. The biggest surprise for me this experiment was not that I went through some kind of mystical transformation as if I had just gone on a sojourn to Africa, but that the stigma we associate with food stamps being for the destitute is wholly undeserved, not to mention the rampant demonizing of "dependence" preached by certain political leaders. Truth is, it's not as radically different as we might think, just a bit of help here and there that's all, and this once ignorant student will be the first to say it.

much harder to pick out. What is easy to pick out, however, is the money I spent on things that when, push comes to shove, isn't going to mean very much. For perspective, Europe and the United States spent some \$17 billion on pet food last year; it would only take \$13 billion to meet basic health and nutritional needs in the developing world. I realized that my habits were not that much different and that I should be ever thankful for the opportunity I have been given to live in Carmel Valley and attend school here.



# Dumpster Thriving

by Laura Fouquette

Consumerism is a national addiction. We, as Americans, have an obsession with new. Newer is simply seen as better. New computers, new iPhones, new cars, new everything. You stop using your perfectly functional iPhone 4S just to upgrade to the newer, sleeker, faster iPhone 5s. We are producing more new products than ever before and leaving the past behind. With this endless production of new things comes an enormous amount of waste. The Environmental Protection Agency estimates that the American population creates about 245 million tons of waste per year; twelve percent of the 245 million tons solely accounts for food.

Freegans—a term combining “free” and “vegan”—make up a growing subculture of anti-consumerist individuals who employ a range of alternative living strategies, such as “reclaiming waste,” or what is commonly known as “dumpster diving.” Many freegans practice

veganism, which requires the elimination of animal products from one’s diet and also avoids leather, fur, wool, and cosmetics and chemical products tested on animals. Many freegans will also consume food that is not vegan simply because it is free, hence the name freegan.

This movement stemmed from the anti-globalization and environmentalist movements in large cities of the early 90’s. The Diggers, a 1960’s anarchist street group from Haight Ashbury in San Francisco, gave away reclaimed food to the homeless and are also a large influence on freegan culture. The writings of anthropologist Marcel Mauss, who studied the relationship between interaction and social culture, inspire many of freegans’ core values. Freeganism is an eccentric stew of various ideologies, drawing on aspects of environmentalism, communism, and a zealous individualist work ethic.

Many freegans obtain free food by pulling it out of the trash. There is a preconceived idea that all of the food thrown away by supermarkets is no longer edible and will make someone

sick. However, the common practice of supermarkets and wholesalers is to order massive quantities of perishable food, sell what they can, and then dispose of the rest. Most grocery stores throw out at least \$600 worth of food each day and will not donate it to non-profits due to tax issues and liability concerns. They don’t throw it away because there is something wrong with it; they throw it away because it isn’t economically viable with new shipments of food arriving each day. Supermarkets simply do not have room on their shelves for all of the food. As a result, a vast amount of viable food, most of the time at least a week away from expiration, is thrown away. The Natural Resources Defense Council reports that the U.S. wastes nearly 40% of its food annually. Freegans today view their practices as a direct action to combat the wasteful practices of consumerist America. By reclaiming some of the obscene amount of food wasted, they are making our economic system more sustainable and “saving the Earth.” They aim to challenge the status quo and make a political statement with their unique lifestyle while influencing others to be more cautious of both their waste and spending.



The practice of freeganism is most prevalent with college-educated individuals from middle-class families. Freeganism is especially popular in large cities, such as New York, London, and Los Angeles, where garbage is plentiful and high quality. A typical night for a freegan consists of a midnight trip to a health food store's dumpster. Whole Foods and Trader Joe's are among freegans' most successful diving hauls. Many freegans also dive at smaller businesses, such as bakeries, which often do not have donation agreements with food banks or do not take the time to donate excess food. There's a sense of adventure that goes along with rummaging through a dumpster in the middle of the night. You never quite know what you'll find. Depending on the season, retail rotations, and store, you could find virtually anything from fresh produce, flowers, to home goods. A normal "haul," as freegans call it, is usually enough food to fill your entire kitchen.

Freegans insist, however, that their alternative ways of living are not about the food; it is about giving back to the community. Freegans are individuals who embrace community, social concern, freedom, morality, and sharing. They believe that food is a natural human right, not a privilege. Because of this, many freegans donate most of their hauls to non-profit organizations, which feed and house the homeless. Non-profits, such as Feeding America, will accept food donations from freegans as long as the package is intact and the food is edible. Additionally, Food Not Bombs, a very well established freegan organization, involves hundreds of groups in many cities throughout Europe, Canada, and the U.S. Volunteers at Food Not Bombs use donated or discarded food found in dumpsters to prepare and distribute free vegan meals once a week to the homeless and the poor.

Despite their charity to the



community, freegans are generally looked down upon. There is a certain stigma surrounding those who live off of consumer waste. In a country of germaphobes so obsessed with cleanliness, most Americans are repulsed by the mere idea of freeganism. Although sustainable practices such as recycling clothes and furniture are generally socially acceptable and have even become trendy, combing through heaps of trash for viable food can seem unthinkable to many outsiders. Although their practices are socially unacceptable, freegans aspire to influence others with their unique practices in order to cut overall waste. Many freegans also rationalize dumpster diving by arguing that the number of pesticides contaminating food today causes a much greater danger to the human body than scouring through a dumpster. Roger Clemens, the former President of The Institute of Food Technologists, begs to differ: "Remember that dumpsters are contaminated with a lot of other toxic products, a lot of things you don't even want to talk about. The Institute of Food Technologists is very concerned about the safety of those foods and the implications of unsafe food on people with practices like freegans."

The practices of freegans also pose

possible  
legal issues. A

1988 ruling by the Supreme Court in the case *California v. Greenwood* gave approval to dumpster divers in cities without anti-scavenging laws. Today, most cities implement anti-scavenging laws and most dumpsters of supermarkets are enclosed in a gated area. Because of this, it is still very possible to be arrested and heavily fined for trespassing while dumpster diving, yet many freegans simply don't care and feel that rescuing thousands of dollars worth of food from one store is worth the hundred dollar ticket. Many stores also discourage the practices of freegans because they are afraid of lawsuits from freegans who get sick from discarded food.

Some freegans extend their anti-consumerism practices beyond their eating habits. Many freegans are also "squatters" who live on abandoned property and grow community gardens on empty lots. Because they believe that there is little need to purchase new products due to the waste that society has produced, many freegans have significantly cut down their cost of living. As a result, some choose not to work and live a meaningful life use their time instead to volunteer, campaign for issues, and teach workshops to others in the freegan community.



# Robocrops

by Josh Dillen

The National Agricultural Statistics Service states that between 81 and 86 percent of all corn grown in the United States is genetically modified. Because corn is an ingredient in countless processed and fresh foods, as well as the principal food for livestock, it is safe to say that, as a society, we are surrounded by GMOs. However, the general public seems to know little about the use of GM crops or whether they pose any adverse health risks. The topic cannot be ignored because the production of GMOs is not only huge, but here to stay.

Genetically modified organisms can be any organism that has had its genome altered by artificially introducing a gene from a foreign source. The most common interaction the average American has with GMOs would be the genetically modified crops that pervade our food supply. These crops can be produced in a number of different ways. The most common way of producing genetically modified crops is by bombarding young seedlings with metal beads covered in DNA that codes for a gene of interest. This process forcefully causes plants to take up the gene and incorporate it into their genome. This kind of process requires access to expensive and difficult to operate machinery, which means this process must take place in laboratories.

Where modern agriculture has run into problems or faced difficulties with crops, genetic modification has provided solutions and remedies. One of the most famous solutions was developed to replace the use of pesticides. Corn crops were being decimated by the corn borer caterpillar. Before genetically modified corn was available to farmers, the solution was to spray the crop with insecticide. This was an expensive endeavor both monetarily and for the environment. Genetically modified Bt corn produces an insecticide inside of its leaves to protect it from dangerous pests, while also protecting the environment by not polluting our environment or water supply. Another success story of genetic modification is the papaya industry. Hawaii's papaya industry was threatened by the deadly ringspot virus. Through genetic modification, the papaya was given a resistance to the virus which has prevented the total destruction of one of Hawaii's important food crops. While the story of genetically modified crops may contain many success stories,

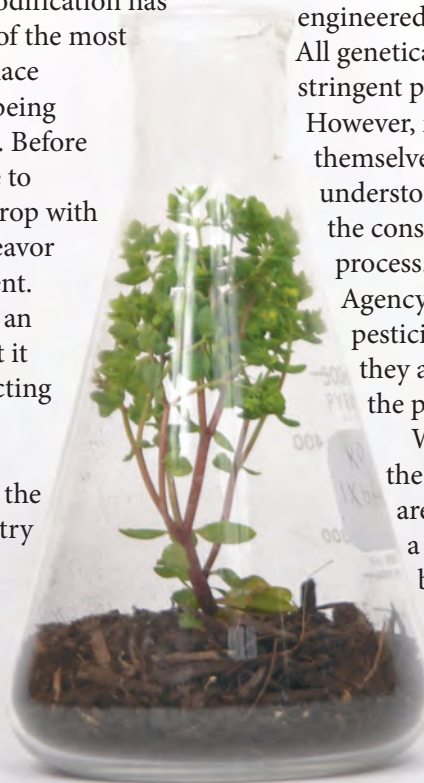
there are strong arguments against their use.

One such argument, is that pesticide producing crops could create strains of resistant bugs that are immune to the poison. In the case of Bt corn, the pesticide will kill off all pests that invade their land and leave behind only the highly resilient bugs. Eventually, the population of pests will be comprised entirely of pesticide resistant individuals and the corn will once again be defenseless against the corn borer, a caterpillar. Another insecticide must then be produced and integrated into the corn genome to counteract the now Bt resistant populations. This process could continue indefinitely as insects continue to develop resistances to new treatments. A continual cycle of new seeds with new and better insecticides puts farmers at the mercy of large and ruthless companies such as the biotechnology giant Monsanto. Farmers would have no choice but to continue returning to the same corporations producing genetically modified crops. However, techniques to prevent resistance are being developed. If sanctuaries of non-genetically modified crops are planted around genetically modified crops, corn borers and other nuisance insects are not completely killed off by the insecticide. In reality, enforcing the creation of these sanctuaries is difficult at best and farmers are unlikely to purposefully sacrifice a portion of their yield.

Another argument against genetically modified crops is the safety of consumption. As it stands, the United States Food and Drug Administration states that genetically engineered food presents no immediate risk to consumers. All genetically modified foods must adhere to the same stringent policies as regular food in the United States.

However, many consumers are still unsure about feeding themselves and their families with these new and poorly understood crops. One might be quick to point out that the consumption of pesticides is most likely an unsafe process. However, the Environmental Protection Agency works to ensure that all insecticides and pesticides are safe for human consumption, whether they are applied directly to the crop, or produced by the plant due to genetic modification.

While GM crops have been developed under the watchful eye of government agencies, mistakes are still made. One crop, Starlink corn, contains a form of the Bt insecticide that takes longer to break down. Its creators applied for approval by the EPA but the crop was determined to not be safe for human consumption. The crop was, however, approved for use with livestock. In the year 2000, starlink corn was found in human food products by a third party testing facility. The FDA received

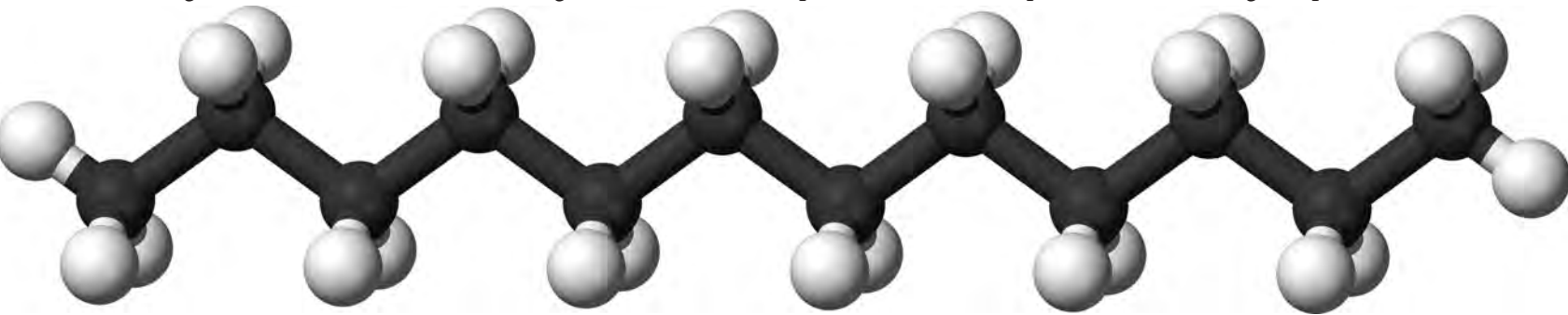




heavy criticism for not properly testing food to insure its safety and all products containing starlink corn were recalled and removed from the market. While the systems and administrations are in place to prevent potentially dangerous food from reaching the market, they are useless if they are not properly used.

A popular sentiment regarding genetically engineered food is that the organisms are unnatural abominations. Proponents argue that humans have been genetically altering crops ever since the advent of agriculture. For the most part, this is true. Farmers have been selecting individuals with the most desirable traits and breeding them far longer than we have been bombarding them with DNA.

Large biotechnology firms have been patenting their genetically modified crops, as well as the genes used in them. The genetic modification giant Monsanto is infamous for their large legal department that is quick to point out illegal use of their products. Monsanto states that it has filed lawsuits against farmers 145 times in the last sixteen years regarding use of their genetically modified crops and has gone to court eleven times and won every case. The most common lawsuit Monsanto files is that farmers have breached a contract that disallows them from saving their seeds from one season to the next. This is considered patent infringement, as the customer has reproduced a Monsanto product. Monsanto's practices are not illegal as patents and



This has led to corn that is unrecognizable in comparison to its indigenous form and thousands of different forms of apples. To GMO supporters, the new “unnatural” techniques are simply ways to speed up the processes already used by farmers and acquire new genes for frost tolerance or pest resistance much quicker. To opponents of GMOs, transplanting genes from one organism to another depletes the integrity of the original organism, making it the gross work of a mad scientist.

contracts are protected in the United States and Monsanto has every right to seek protection.

GMOs may be controversial and scary to some consumers, we can be sure of one thing. GMOs are here to stay. Genetically

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# The Food Footprint

by Georgie Lawson

Turning the lights off, taking short showers, and recycling are all things that have been ingrained into our brains from a young age in an effort to protect the environment, but while these are all good rules to abide by, many people are unaware that one choice we make every day, a choice that often seems to be the center of our teenage attention, has the potential to impact the environment in more profound ways than just about any common source of concern. The choice is one with the potential to damage the biodiversity of our oceans exceeding the

capabilities of liter runoff, to drain our fresh water supply far beyond household use, and to fill our skies with more carbon dioxide than even transportation produces. The choice is what we eat.

Think about all of the fresh water that your family uses at home every day. Showering, washing dishes, watering plants, filling the pool, cleaning cars, and whatever else takes place, uses a lot of water, but in the grand scheme of things, only about 10% of fresh water supply is attributed to domestic use. Now take a guess

at how much of our country's fresh water supplies are designated for agriculture. It's likely higher than you might assume. If you guessed 70%, you got it. With a statistic like that, the food we chose to consume can help or hurt the environment in profound ways. The truth is, what we eat makes a difference.

These surprising effects of the industry are by no means isolated to water use. Take pollution for example. Many people target cars as the culprit of damage resulting from green-house gases, but in reality, animal agriculture alone is responsible for over 50% of green-house gas emissions. While it's still important to promote efficient means of transportation, misconceptions like these often block the path to improvement simply because the general population doesn't think about what went into that hamburger on their plate. If you're still not convinced, maybe you'd be interested to know that the average shrimp trawling operation tosses back 80% to 90% of the fish it catches as dead bycatch, harming the ecosystem beyond compare. Or for each pound of beef, 200 square feet of rainforest is destroyed. Or that, in past years, agriculture has used close to 1000 pounds of pesticides per year, which often end up in streams and ground water stores.

But not to worry! Combating this issue is like taking a trip to Baskin Robins. You have about 31 different delicious choices. Buying local is a great way to reduce pollution so that rather than purchasing a tomato farmed in South America that has been shipped extensive distances, you can buy one picked right here in San Diego, which also supports the local farmers. Eating organic is also a step in the right direction, as it greatly reduces the amount of pesticides in circulation. Also, try to lay off the KFC a bit. As

meat is the leader in environmental damage, using 11 times the amount of fossil fuels and over 50 times the amount of water that grain does, a little restraint could go a long way (and your health will thank you too).

I could ramble on about the statistics of the whole operation, but the bottom line is that the processes to produce food affect everything from the paths you walk on to the ocean you surf in. Every bite you take is a choice, and while I can be fairly certain that the human race isn't going to stop eating altogether to fix the environment, I have faith that the global population is capable of making conscious choices. Different foods vary widely in the environmental damage they cause, so being smart and making dietary changes your conscience can be proud of will go a long way.





# The Gatorade Revolution

by Timmy Chu and Griffin Laymon

In 1965, a team of researchers at the University of Florida created a drink that revolutionized the world of sports. Gatorade was first created at the request of Ray Graves, head coach of the University of Florida football team, to serve as a hydrating replacement for bodily fluids. The earliest batches of the first real “sports drink” consisted of water, sodium, sugar, potassium, phosphate, and lemon juice. The formula has changed drastically since then. Over the years, Gatorade has developed from a sports drink into an everyday beverage that is sold almost everywhere. Despite its overwhelming success, Gatorade has faced obstacles including criticism over health issues stemming from artificial sweeteners and

the true impact of electrolytes on the body.

Gatorade originally started as a basic sports drink for the UF Gators football team but has evolved into a multibillion dollar franchise. It was first produced and marketed by Stokley-Van Camp, but was later purchased by Quaker Oats Company in 1983 for \$220 million. Quaker Oats, along with Gatorade, was then bought by PepsiCo in 2001 for \$13.4 billion dollars. Since being acquired by PepsiCo, Gatorade has trumped Coca-Cola’s Powerade to become “the sports drink.”

Gatorade first received recognition outside of its humble origins at the University of Florida by becoming the official sports drink of the National Football League

(NFL) in 1967. Realizing this fantastic opportunity, Gatorade supplied the teams with bright orange coolers and stocked the sidelines with green cups to maximize television exposure and brand recognition. These coolers and cups have become a representative feature for Gatorade and can still be seen today on the sidelines of all NFL football games. As the use of television grew and began to increasingly impact the sports world, Gatorade expanded from being the official drink of the NFL to the official drink of Major League Baseball (MLB), National Basketball Association (NBA), and Major League Soccer (MLS) as well. Gatorade has also recently begun endorsing superstar athletes to promote their product. In doing so, the company is further appealing to kids and their athlete role models. By sponsoring these athletes, kids are more likely to believe that in order to be like these professionals, they must eat and drink like them.

With Gatorade on the sidelines of NFL games, it has been incorporated into the winning culture of football. The Gatorade shower has become one of the largest





traditions in American sports. It is a tradition that involves dumping a cooler of Gatorade and ice over a coach's head after a big win, such as the Super Bowl. The tradition doesn't have an official origin as several players have claimed to invent the shower. No matter the origin, the ritual gained recognition in the 1986 season. The New York Giants, led by Coach Bill Parcells, finished the season with a record of 14-2 and went on to win the Super Bowl. Near the end of each victorious game (17 wins total), Giants players would pick up a cooler and douse members of the coaching staff with icy cold Gatorade.

As its brand has grown, Gatorade has gradually left the athletic fields and emerged in everyday places like school cafeterias. As it has become sweeter than its original formula, Gatorade has appealed to kids more and more. The science behind Gatorade is based on replenishing the body's electrolytes and fluids. The Gatorade formula for electrolytes has always been a mixture of potassium and sodium, but the ratio of carbohydrates (sugars) to electrolytes has changed with its target market. As more and more kids are consuming higher quantities of sugar, Gatorade has been changing its formula to keep up with this sugar rush.

With the addition of more and more sugar, Gatorade has become a highly-studied product by dentists in hopes of learning more about the effects of the beverage on dental health. Some studies have shown that Gatorade is worse than Coke and Red Bull for your teeth. Because of these studies, dentists have been urging their patients to stay away from sports beverages. Research has increasingly shown that sugary drinks are the major culprit for tooth decay and the development of cavities. Researchers at the University of Iowa conducted an experiment on enamel and compared the effects of regular

Coke, Diet Coke, Gatorade, Red Bull, and 100 percent apple juice. The results of the research showed that Gatorade was the most corrosive of the five tested products on both enamel and the roots of the teeth. While the effects of Gatorade are undoubtedly negative on teeth, there is no evidence that it is substantially worse than sodas for your health.

In 2010, Gatorade introduced the G series. This re-labeling was focused on supporting athletes by introducing a pre and post-game formula. When introducing the new products, Gatorade made sure to appeal to kids. The pre-game products, also known as the "prime" series, contain 23 grams of sugar in the Prime Sports Fuel Drink and 16 grams in the Energy Chews. The post-game recovery aspect, "recover," of the G series contains a Protein Shake packed with 20 grams of sugar and the Post-Game Recovery Beverage containing 41 grams of sugar. To offset the exorbitant amounts of sugar in the "prime" and "recovery" series, Gatorade created a low-calorie "thirst quencher" for the second phase of the G series: Perform.

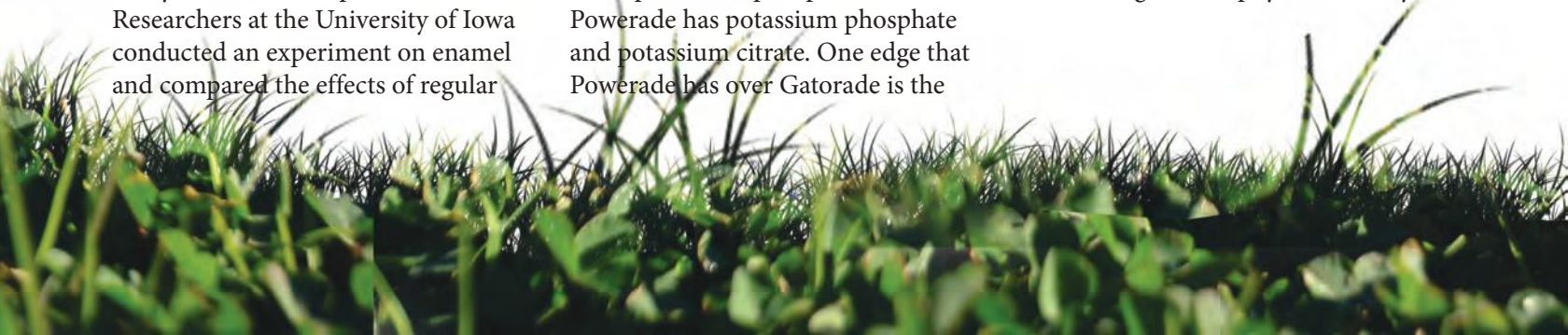
As the Gatorade franchise has boomed, it has easily overtaken Powerade as the number one sports drink. In 1988, the Coca-Cola Company created Powerade to compete with PepsiCo's Gatorade but has not had the same success. As of 2011, Powerade claimed only 28.5 percent of the US market for sports drinks compared to Gatorade's whopping 70 percent (which fell from 77.2 percent in 2010). Gatorade and Powerade are fairly similar products in some aspects but do have a couple major differences.

Both contain electrolytes, but in different forms. Gatorade's formula uses sodium citrate and monopotassium phosphate while Powerade has potassium phosphate and potassium citrate. One edge that Powerade has over Gatorade is the

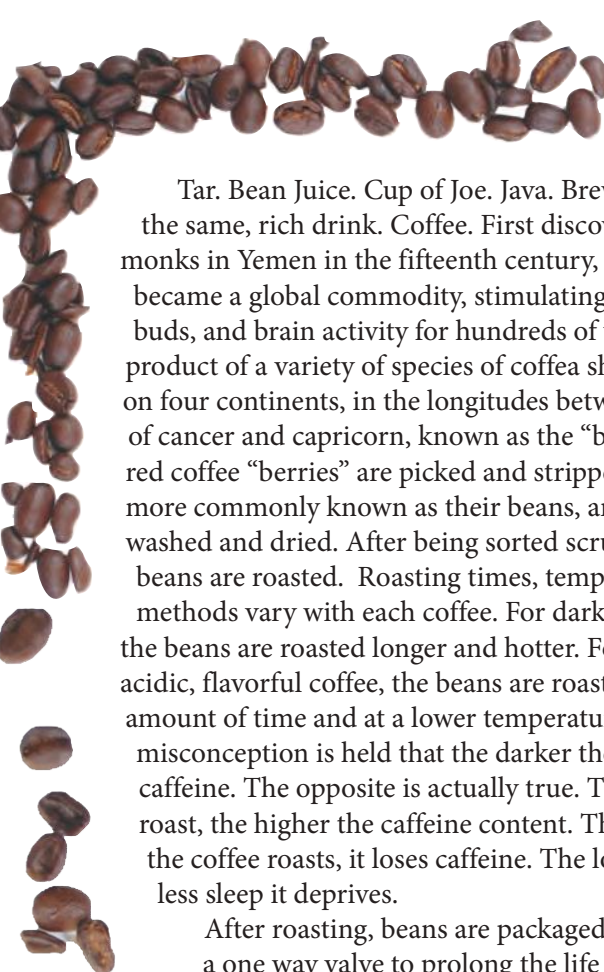
infusion of vitamins B3 (niacin), B6, and B12. Lack of niacin for humans can cause nausea, skin and mouth lesions, anemia, headaches, and tiredness. Vitamin B6 is important in metabolism and B12 has a key role in the normal functioning of the brain and nervous system as well as the formation of blood.

The largest difference between Gatorade and its Coca-Cola counterpart is the form of sugar used in their respective formulas. As said earlier, Gatorade is sweetened with a sucrose-dextrose mix while Powerade contains the dreaded high fructose corn syrup (HFCS). The main issue that has arisen with HFCS regards concerns over its possible contribution to obesity, type-2 diabetes, metabolic syndrome, and cardiovascular disease. In addition to sugar, electrolytes are an ingredient present in all sports drinks. "Electrolytes" is essentially a fancy term for salts, specifically negatively charged ions. Electrolytes are important to the body because they are used by our cells to maintain voltages across cellular membranes and to carry electrical impulses across themselves and to other cells. In short, they regulate nerve and muscle function as well as our body's hydration, blood pH, and blood pressure. Sports drinks focus on replenishing the electrolytes that are lost in sweat. The most common electrolytes in our bodies are sodium and potassium, hence Gatorade's use of sodium chloride, sodium citrate, and monopotassium phosphate.

No matter the ingredients, Gatorade will remain at the top of the sports beverage and food products market because of its delicious, sugary flavors and purpose to replenish water, carbohydrates, and electrolytes that are lost during intense physical activity.







Tar. Bean Juice. Cup of Joe. Java. Brew. All names for the same, rich drink. Coffee. First discovered by Sufi monks in Yemen in the fifteenth century, coffee rapidly became a global commodity, stimulating economies, taste buds, and brain activity for hundreds of years. Coffee, a product of a variety of species of *coffea* shrubs, is grown on four continents, in the longitudes between the tropics of cancer and capricorn, known as the “bean belt.” Ripe red coffee “berries” are picked and stripped for their seeds, more commonly known as their beans, and the beans are washed and dried. After being sorted scrutinizingly, the beans are roasted. Roasting times, temperatures, and methods vary with each coffee. For darker, richer coffee, the beans are roasted longer and hotter. For lighter, more acidic, flavorful coffee, the beans are roasted for a shorter amount of time and at a lower temperature. A common misconception is held that the darker the coffee, the more caffeine. The opposite is actually true. The lighter the roast, the higher the caffeine content. This is because as the coffee roasts, it loses caffeine. The longer it roasts, the less sleep it deprives.

After roasting, beans are packaged airtight or with a one way valve to prolong the life of the coffee.

Coffee begins to lose flavor and freshness when in contact with oxygen, and the roasted beans release carbon dioxide gas naturally.

Immediately before brewing, the whole beans are

ground into powder, whose coarseness or fineness is determined by the brewing method being used. Hot water is pushed through the grounds and comes out as the world’s most irresistible beverage.

That’s all great and interesting, but why should you care? What makes coffee so infinitely better than the tea Josh is pushing to your right? I’ll tell you. Coffee makes you happier. It’s a scientific fact. To be entirely accurate, caffeine makes you happier. In dozens of studies caffeine has been proven to be a powerful antidepressant. And is there any better way to get your happy fix than through coffee? Through tea? Please. In the average cup of medium roast coffee, there is twice as much caffeine than in the most caffeinated of teas. In a shot of espresso –we’ll get to that in a moment– there is four times as much caffeine than in a cup of tea. Also, as well as having such a feeble amount of caffeine, most teas have chemicals inherent to them that calm, counteracting your much needed jolt. And, for those people who need to sleep, or as coffee connoisseurs call them, weaklings, there is always decaf coffee.

But what if you want a little variety in your beverage life? I told you we’d get to espresso. Espresso is a type of concentrated coffee created by forcing near boiling water through finely ground and densely packed dark roast beans. This process produces an espresso “shot,” a coffee shot that generally is a little thicker than average coffee, and with a caramel, nutty flavor.

Using espresso shots, thousands of different drink combinations are possible, ranging from a simple latte consisting of steamed milk and espresso shots, to a blended coffee smoothie, utilizing shots, milk, ice, and various other ingredients. There’s truly an espresso drink for everybody. Well, everybody except those tea sipping señors to your right. For them unfortunately, tea only comes in different flavors. You can add milk, or you can add sugar. If you really want to be creative, you can add both. And that is all the variety you are likely to see from any water soaked leaves. And if straight coffee is what you are looking for, but you still want to switch it up, don’t you worry. Coffee varies greatly depending on where it is grown and how. The acidity, body, aroma and flavor all shift dynamically with the beans and with the roasts.


If by now you still think that foliage dunking is the way to go, make it through this last paragraph and you’ll be hard pressed to reach for that lipton next time you’re feeling cold. Your average cup of coffee is two dollars. At Starbucks, the most expensive (and most delicious ever) coffee is the Ka’u coffee, from hawaii, at \$4.25 a cup (large). The most expensive coffee in the world, commonly known as cat poop coffee, sells for \$160 a pound. Not a price to be scoffed at. But your average large tea will cost you \$2.50, for one of those generic, pulled-off-a-highway-bush-and-put-in-your-cup teas. The most expensive teas at a store like Teavana can be upwards of \$6.00. But the most expensive tea in the world, the Da Hong Pao tea from china’s obviously gold soiled mountain, weighs in at over \$35,000 an ounce. There is absolutely no sufficient explanation as to why a shriveled up sprout soaked in hot water should cost, ounce for ounce, more than gold.

In conclusion? Drink coffee. Enough said.

## A Good

by Ethan Rappaport





The Merriam-Webster dictionary defines the three letter noun “tea” as “a drink that is made by soaking the dried leaves of an Asian plant in hot water.” Tea is so much more than that. It is a cultural icon. It is a veritable feast for the palate. It is an integral component

# Mugging

and Josh Dillen

of a relaxing morning, noon, evening, or late night engagement. Simply put, tea is the superlative beverage.

The history of tea is rich with culture, tradition, and shrouded in a mystic haze that carries a beautifully subtle aroma. One popular discovery legend implies that the emperor of China himself discovered the great herb. As the monarch sipped some steamy water, a great breeze rolled in and blew some leaves into his water. Initially unaware

of the new inhabitants of his cup, the emperor took a sip. While he was initially shocked by the foreign bitter taste, he realized the great restorative power of the delicate leaves. While this legend may not be true, the Chinese were the first to brew leaves of the *Camelia sinensis* plant. They were not able to contain their great discovery and tea spread quickly to nearby Asian countries. As it traveled, tea picked up new traditions and flavors.

Across the world, each country has a new tea flavor to offer. China has all of the traditional varieties on offer. Delicious white, green, yellow, and oolong teas are all readily available as well as the fermented black tea. In Japan, green tea is the most popular form for its subtle and delicate flavor. As tea moved west, the fermented black tea became more popular.

It became an icon for the British when the drink became refreshment for more than just the aristocracy. Iced tea is tremendously popular in America, but even more so in the South.

Today, tea has taken on many forms and penetrated countless cultures. At least in America, tea has broken the *Camelia* barrier and has come to be known as any herbs steeped in hot water. Tea is now most commonly served in the convenient tea bag, a semi-translucent paper bag that lets the flavor out and none of the herbs.

However, tea can be found in any number of forms. Popular with tea snobs is the loose leaf form. The tea can be steeped in any number of receptacles that sit directly in

the tea mug, or in a special cup. There is even a product for those with no time to spare, instant tea. While it may be a convenient alternative, those seeking the true taste of tea should overlook these products. However, with so many varieties, it can be difficult to discern the true taste of this tannin stained beverage.

Tea's many medical chemicals and pleasant effects make it enjoyable beyond the taste. The most well-known of these substances is the now ubiquitous caffeine. Caffeine is a fixture in the American workplace, as well as American schools, usually delivered in a mug of bold coffee. However, a typical cup of coffee may contain almost ten times as much caffeine as a mild mix of green tea. This much caffeine quickly carries the user from alertness into a jittery mania. A chemical found in tea called L-theanine interacts with the body's reaction to caffeine and makes its effects much more favorable for caffeine's usual intended use.

Theanine allows the body

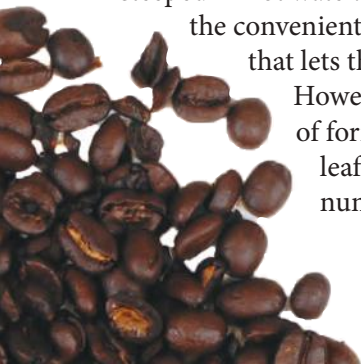
to be woken up and energized by caffeine, but also keeps the mind in check by giving it a calming sensation. While getting cranked up on

caffeine

with a double espresso mocha latte may keep you awake for a while, a

healthy cup of green tea provides all of the materials to stay awake and stay productive.

Tea can be used for any number of reasons, by any number of people, in any number of settings. For example, green tea ice cream is not only common, but enjoyed greatly by many east Asian countries. Due to its global appeal, tea is a uniting factor across the world. Every cup of tea enjoyed is a participation in this human tradition that is more than thousands of years old.





# Remembering Justin Yung

by Jody Miller

Justin Yung, a freshman at CCA known for his smile and kindness, passed away on December 16th, 2013. Justin was a presence people noticed at this school. After hearing the first period bell, one could expect Justin to be standing in the same spot, with a big smile on his face. His true thoughtfulness rubbed off on others, and as a member of the Robo Ravens, Justin kept up with the high academic achievement that CCA is known for.

Since the news hit the CCA community, there has been an outpouring of love and support. There was a poster in the middle of the quad, with messages such as, "In loving memory of Justin Yung" and "You will be missed forever" accompanied with bouquets of flowers. On the Dedication to Justin Yung page on Facebook, one can see how Justin truly had a genuine presence here at CCA. Josh Goldstein wrote that, "He was a great member of our team [Robo Ravens]." Another post mentions



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Justin's kind spirit, noting, "he was always smiling and one of the nicest people you would probably ever meet". On the Facebook page, his brother Nathan expressed how thankful he is for the love that CCA students express for Justin when he wrote, "I would like to thank you all for joining this Facebook page and showing your empathy for my family as well as your sorrow for Justin's passing away. To have so many people care for him makes me, his older brother, proud that he was my younger brother, and I will always be thankful and grateful for all your guys support and love for my beloved brother". Mr. Happ, Justin's Geometry teacher describes Justin as "a super respectful kid" that "always had a positive attitude in class and worked well with his classmates." Mr. Happ also praised Justin's respect for his classmates, stating that Justin "stuck up for a kid in the class once when someone said something

negative" and that his classmates "had only positive things to say" about the CCA freshman.

Justin not only had a positive impact on the CCA community, but on the city of San Diego as a whole. He volunteered with the San Diego Food Bank, where he would pack food for those in need and played music at a senior rehab center, in an effort to make their lives a little easier. Justin truly made a difference that will be forever felt and remembered as shown at the memorial held for Justin on December 21st, 2013. The Yung family has been truly touched by the support that has come from the community at CCA and continues to share the memory of the special person that Justin was: "Justin, you are our loving angel. We all miss you so much, you will always be in our heart and we love you very much. Someday we will meet, and be a family again."



*\*Per the request of the Yung family, we have included information regarding the*

# The Danger of Food Allergies

by Laura Fouquette

According to Food Allergy Research & Education, food allergies affect almost 15 million people, including 1 in 13 children. The incidents of food allergies have risen significantly over the last twenty years. The most common food allergies include peanuts, tree nuts, milk, eggs, and wheat. Although most think of an allergic reaction as getting a bit itchy, it can actually be a serious medical condition. Everyone living with a food allergy is at risk for anaphylaxis, a life-threatening type of allergic reaction. There are many precautions that we can all take in order to increase awareness about allergies and try to prevent severe allergic reactions.

If you do not have a food allergy yourself, be considerate of your peers who do. Because there is not yet a medication to prevent food allergies, the only way to prevent a reaction is to strictly avoid certain foods. In order to experience an allergic reaction, someone has to actually ingest some of the allergy-causing food. If you have eaten a

food with peanuts in it, you have to make sure to wash your hands before touching the person with the peanut allergy. Simply touching them without washing your hands could transfer the peanut protein and cause a reaction. Dr. Katharine Woessner, an allergist at Scripps Carmel Valley, urges students to “show your classmates some support and don’t eat a peanut butter sandwich right next to them.” Dr. Woessner encourages students to have more empathy and awareness for the ingredients in everyday foods and for what their peers with allergies experience: “It might be hard for someone without a food allergy to understand, but it’s very stressful to go through your life constantly afraid that if you eat something, it might harm you.”

Students with allergies should always have an epinephrine self-injector, such as an EpiPen or Auvi-Q, a new epinephrine auto-injector that talks someone through the injection process. Having an auto-injector with you at all times allows you to immediately start treatment after exposure. For less severe reactions, Dr. Woessner recommends “an antihistamine, like Zyrtec or Benadryl,” but one should always consult with their physician. The doctor adds, “If there’s any trouble breathing or the reaction is happening very quickly, then use the autoinjector and call 9-1-1.” Dr. Woessner also recommends “always having a good friend who knows about your situation.”





# Transcontinental Traditions

by Georgie Lawson

Food has perhaps been the largest pioneer to bring foreign culture into the United States. We are a country of immigrants, where people from far off places have brought their own flavors to the mix, allowing everyone to enjoy and gain insight into a particular culture. Food has essentially served as this unparalleled portal to distant places. Of course there are foreign-based but largely Americanized restaurants, such as Panda Express, Chipotle, and the like that may not offer the same insight, but authentically ethnic restaurants can teach us a lot about different cultures' customs. What a culture eat and doesn't eat, how food is prepared, and the rituals that go along with meals can say a great deal about a particular society. Just as it unifies a family sitting around a table, food unifies cultures in ways surpassing just about anything else

As a daughter of a southern man who lives and breathes Memphis barbeque, I grew up eating a lot of meat. Whenever we would visit family in the south, my aunts and uncles would reminisce over memories of my grandfather's barbeque restaurant and immediately be brought back together after years of separation. I felt the weight of food in our family's culture, and for years I abided by that diet because I didn't know any different. That was my culture. That was my home. However, as I grew older and more independent I decided that I no longer wanted to eat meat. My parents were supportive, but I was still questioned upon visiting my relatives. Why don't you eat meat? Don't you miss it? When do you think you'll go back to normal? Not to say these questions weren't annoying, but I understood. Barbeque was more than food for them; it was their culture. And being immersed in a culture from day one manifests itself in one's perspectives, inclinations, and, of course, tastes.

If you were to look around your classroom right now, you'd notice a lot of familiar faces from a lot of different backgrounds. When all of your classmates go home and eat dinner, they will most likely be eating different things. Sure, most of us enjoy some similar foods, but coming from a certain culture can designate the common cuisine in a household.

Sara Toulouie, a Canyon Crest senior of Persian descent, notes the importance of food in her culture, stating "eating is a very essential component of forming friendships, communion, etc.," and that "children are expected to always eat with grandparents and parents." She emphasizes the unifying role of food in her family, as well as the delicious dishes one may see floating around the Toulouie household. "The most common dish would be the famous kabob that we cook with tomatoes on the side, with a famous spice

called Sumac that is added to the rice with Saffron," she adds.

Another foodie who enjoys reconnecting with his roots through a good meal is Kyle Grozen. He humorously states, "Latkes make me happy. They create a feeling deep down in my stomach, a feeling of grease, potatoes, and faith," but returns to seriousness and comments that "enjoying a great traditional meal helps me remember the background of where my family comes from." He continues to elaborate on the unity that results from having his family together and the fun he's had sharing traditional Jewish foods with friends who aren't as familiar with the cuisine or culture. He suddenly stops, looks at me, and comments on how much this conversation is making him want challah. I told him I agree, as would most people who have tried the delicious Jewish bread.

Texas native and fellow Raven, Caitlin Vogt, shares my southern routes and reminisces about the food she grew up on, called Texmex (a mix of Texas barbeque and Mexican food). "Food for me is super nostalgic," she states, "even just the smell sends me into a flashback of when my brother and neighborhood friends would play soccer on the dirt field behind a local Texmex joint." San Diego definitely embraces a different culture than her birth place of Austin, Texas, so she says that "food keeps [her] connected with [her] home." She sees food as a representation of the place she used to live and all that goes along with it.

Mr. Quinn, CCA's own Japanese teacher, agrees with this idea of food representing a culture, as it is an indicator of the mindset the local population embodies. The Japanese have incorporated their conscious values into their eating habits. "Japanese people bring their own containers and chopsticks to restaurants," he notes, "they're big on preserving – always re-use." Japan's cuisine also emphasizes living off the land, not only as a result of their island geography, but also due to their focus on freshness, which ties into the culture's overall morals of clean living. However, what they eat isn't the only important thing to the Japanese when it comes to food. How they eat also has some interesting qualities. One way that Mr. Quinn teaches students this is by setting up a kotatsu – a heated table, low to the ground – in his classroom. He tells me that it is a traditional way for people to gather together for a cup of tea and has been part of the Japanese culture since the 14th century.

If described in one word, the culture of the United States may be classified as "eclectic." We truly are a country of immigrants, and it shows in our cuisine. Looking back in history, immigration waves brought more than just people





to the United States; it brought culture. And that culture often manifested itself in food, as local joints sprang up offering foreign food, as well as a foreign perspective on the culture it represents. We still see this today in places like San Diego's Little Italy or San Francisco's Chinatown, which offer insight into the values and customs of far off places, thanks largely to the authentic food they offer. As a nation as eclectic as we are, food now not only bonds people of a mutual culture together, but also serves as a learning mechanism for others who are not part of that nationality. There is a reason people go to Chinatown for Chinese food

and Little Italy for Italian; it is because it offers that cultural experience that your local Olive Garden may lack.

I'm sure just about everyone would agree with me when I say that food is wonderful. Admittedly, the taste is probably the main reason, but food's presence as a cultural portal is definitely still worth noting. Its universal enjoyment brings people together and teaches them about different backgrounds that compose the diverse population that our country hosts. It is a bonding mechanism, for families of one ethnicity and friends of multiple.



# A Weight on the Nation

by Emily Abrishamkar

For those of us who have traveled outside of the United States, you have probably noticed that upon arriving in practically any foreign country there are noticeably less people sporting plus sized clothing and those who are, are likely your fellow American tourists. Obesity is a serious problem in the United States; we are considered the fattest nation in the world. For a country that clings to Barbie-Doll societal standards of body image and refers to Khloe Kardashian as “the fat Kardashian”, it seems strange that according to the Centers for Disease Control and Prevention, over 72 million adults are obese. We have reached the point where obesity is even classified by the American Medical Association as a disease.

What is obesity other than just being overweight? Someone that is obese can be distinguished from someone who is overweight when their body mass index (BMI), the measure of body fat in relation to height and weight, surpasses 30. While the greatest factors in causing obesity are poor diets and insufficient physical activity, there are other components that lead to obesity. Excessively watching television, not getting enough sleep, genetics, and environment as a whole are also shown to influence a person's weight.

If you could use a time machine to go back to the 1960s not only would you experience better music, but you would also see that the average American adult was about 24 pounds lighter than they are today. Within the past three decades, the number of Americans suffering from obesity has skyrocketed from 15% in 1976 to 35.9% in 2010 (Centers for Disease Control and Prevention). “Baby fat”, as you have it, has become more than

merely that awkward elementary school stage and less children are simply “growing out of it” as expected. Obesity rates among six to eleven year olds more than doubled from 7% in 1980 to 18% in 2010, and those from ages 12 to 19 have likewise increased during that period. Probably most startling is the fact that one in every eight preschoolers, encompassing two to four year olds, is shown to be obese, multiplying their chances of being overweight or obese as an adult by five.

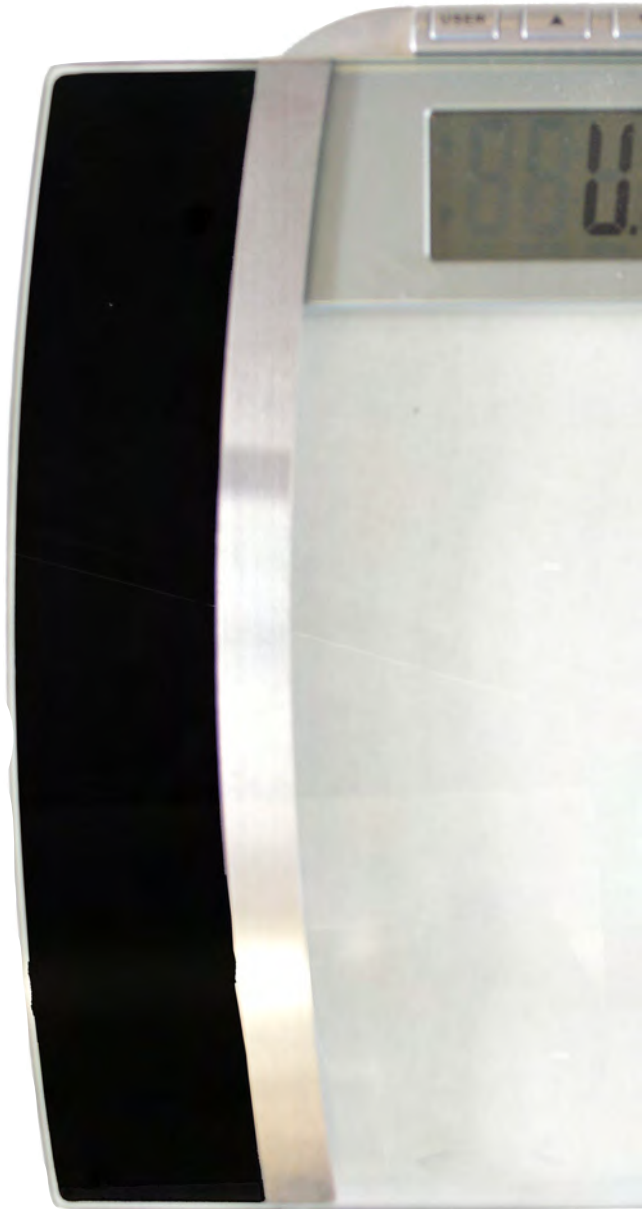
If America continues to follow this pattern, the F as in Fat organization, a project of the Trust for America's predicts that by 2030 46.6% of California will be obese, compared to the estimated average for all of the US being over half of the population.

The hard truth is: it is easier and cheaper for most Americans to live off of the Wendy's dollar menu nowadays as opposed to cooking healthy foods at home. The Kim and Leigh study conducted in 2010 revealed that there is a strong correlation between salaries and obesity; people with low incomes are more likely to be obese than those who earn higher wages. For families living on minimum wage, when a liter of Coca Cola costs as much as a bottle of water, they do not see any reason to go with the healthier choice.

While the fast food binges do offer instant gratification at a fraction of the price of an organic chicken meal, research indicates that the long term effects of obesity are far more costly. A recent study conducted by RTI International, the Agency for Healthcare Research and Quality, and the U.S. Centers for Disease Control &

Prevention found that America spends an estimated annual \$147 billion on obesity. Additionally, the study established that an obese person requires approximately \$1,429 more per year than a normal sized person for medical costs.

The notion that a person can be obese, yet still maintain their health has been heavily debated. Several in-depth studies, however, prove that obesity is the antithesis of health. Research published by the Annuals of Internal







that largely revolve around promoting physical activity and consuming the correct portions and nutrients have made little progress in some areas. First Lady Michelle Obama focuses on attacking childhood obesity with her “Let’s Move” initiative, which consists of four pillars: providing parents with the tools needed to make informative decisions regarding their children’s health, implementing the Child Nutrition Act to fill school cafeterias with healthier foods, lowering the cost of nutritional foods, and raising physical fitness. Mrs. Obama also emphasizes the importance of the older generations to set a good example for the next generation. She urges, “We can’t lie around on the couch eating French fries and candy bars, and expect our kids to eat carrots and run around the block. But too often, that’s exactly what we’re doing.” While some conservatives criticize her for her aggressive approaches, others insist that it is not vigorous

of a good for society’s well-being.” The concept of the fat tax being that if the junk food and sugary beverages are more expensive than the healthy alternatives, people will be obviously more inclined to lead a healthy lifestyle.

Still, others find that the best way to loose weight and overcome obesity is not by the conventional means of healthy diet and exercise, rather by surgical aid. Various surgeries are available for the obese who are desperate to reach their ideal body weight. Although these surgeries may seem like the “easy way out” for weight loss, the recovery and side effects are severe.

As the number of obese people in America has risen enormously, society’s view on being fat creates a stark juxtaposition. The American public as a whole proves quite discriminatory when it comes to size, despite 69.2% of us being classified as overweight. According to a survey taken this year, a solid 62% of Americans believe that overweight passengers should pay for a second seat if they do not fit. As a culture, we praise Adele for being the perfect role model for the average size woman in the US, and entertain ourselves with fat people pushing themselves to unnatural and unhealthy ways of weight loss, as in the show *The Biggest Loser*. In our daily lives, however, we do not seem to have any compassion or tolerance for anyone of a larger size.

Medicine indicates that people who suffer from obesity have a 24% increased risk for heart attack and stroke. The Centers for Disease Control and Prevention also states that obese people constitute a massive 80% of those with

the most common form of diabetes, Type 2 diabetes.

Our government has prioritized the reduction of obesity, but so far the measures

enough. Recently, the idea of a fat tax grasped the attention of a number of Americans. This suggested tax would institute an extra tax on food products that are specifically high in fat or sugar, or just unhealthy goods in general. Oliver Mytton, co-author of an article in the *British Medical Journal* that detailed the effect of food taxes on the public, states, “Economists generally agree that government intervention, including taxation, is justified when the market fails to provide the optimum amount

# What's Up With...? Fad Diets

by Alyssa Kucera

## What is a fad diet?

Fad diets are characterized by claims of rapid, short-term weight loss that feature odd eating patterns, which quickly become popular and then fade into obscurity. In 2012, about 20% of adults in the United States said they were currently on a diet, down from a high of 31% in 1991. In part, fad diets become popular because people look for a quick fix to their weight issues and negative body image but don't realize that fad diets are unsustainable for long-term weight loss.

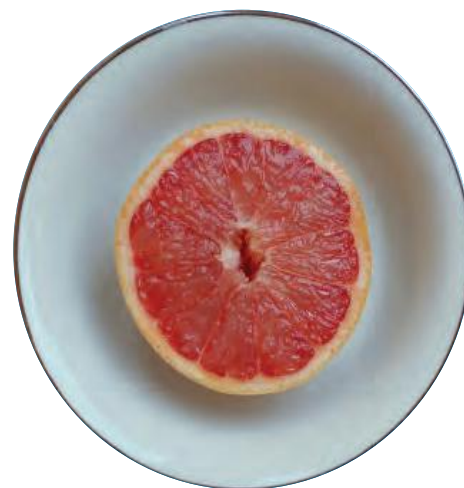
## Paleolithic Diet

First popularized in the 1970s by gastroenterologist Walter Voegtlin, the Paleolithic diet asks dieters to eat only food that one could gather—eggs, seeds, nuts, fruits, vegetables, insects, herbs, meat and seafood. While it is unrealistic to gather food for the average person, grocery stores sell meat without food additives, which is recommended for this diet. This diet focuses on high protein, low carbs, and a similar fat intake to Western diets. The Paleolithic Diet can result in protein deficiencies and problems with the immune system.



## Fit for Life

A dietary lifestyle book written by Harvey and Marilyn Diamond, that explores the theories of food combining and recommends eating only fruit in the mornings, and overall eating “live” and “high-water content” foods. The encouragement to eat raw fruits and vegetables has been praised, but dietitians have disputed other aspects of this theory. Therefore, Fit for Life was listed by the American Dietetic Association as a fad diet.



## Hollywood Diet

The Hollywood diet is a juice diet, you drink water and juice four times a day and no other food is allowed. Generally people try this diet when they want to lose weight quickly before an event because it is common to lose 3-4 pounds after two days of this diet. The juice has various ingredients, but mostly contains water, fructose, pineapple juice, green tea extract, ginkgo biloba, and grapefruit seed extract.

## Grapefruit Diet

This diet first became popular in the 1970s after the claim that grapefruits have a fat-burning enzyme. Normally one would assume this diet entails eating only grapefruits in order to lose weight, but dieters are only required to eat half a grapefruit with each meal and focuses more on eating more meat. The Grapefruit Diet is essentially a low-carb diet, and is still used today. The Grapefruit Diet can cause blood clots due to chemicals in the fruit if combined with birth control.

## Cookie Diet

The Cookie Diet is exactly what you would expect, people who are dieting eat cookies and supposedly lose weight. The plan is to eat 4 to 6 cookies that add up to around 500 calories and contain hunger suppressants and fiber. For dinner, lean meat and vegetables are recommended. By following this diet, one's total number of calories for the day is 1,500. There are also 800-calorie and 1,200-calorie limit plans as well but any plan less than 1,200 calories must be supervised by a medical doctor for safety.

## The Cotton Ball Diet

The cotton ball diet is a dangerous fad diet that involves eating up to five cotton balls dipped in juice, lemonade or a smoothie at one time, to make the dieter feel full without gaining weight. This “diet”, which has been promoted on pro-anorexia websites, may be used to limit food intake at meals or in place of meals. Medical experts consider the practice extremely dangerous. Ingesting cotton balls could lead to choking, malnutrition or even a life threatening obstruction of the intestinal tract. Lynn Grefe, president and CEO of the National Eating Disorder Association, considers the cotton ball diet to be an unhealthy, disordered form of eating, rather than a true diet.



# This Page is Organic\*

by Jody Miller

Organic [ôr ganik]- adj. 1 of, relating to, or derived from living matter : organic soils. • (of food or farming methods) produced or involving production without the use of chemical fertilizers, pesticides, or other artificial agents. In every supermarket you go to today, there will always be an organic section of produce. Organic food first arose in the 1940s as a response to the industrialization of agriculture, which would later be known as the Green Revolution.

The United States Department of Agriculture (USDA), implemented the national organic program in 2002, which created the standards and the “USDA- organic” label on produce to assure what was being labeled organic actually was. Since then, Congress has passed laws such as the 2002 Farm Act, which expanded the market opportunities for organic farming. The Food, Conservation, and Energy Act of 2008 is a five-fold increase in mandatory funding for organic programs. In other words, organic farming has increased so largely in demand that the government has had to create new laws, many including funding.

Organic food used to only be available in health stores. But now, when you walk into the produce section at Vons, there is a banana on one side, and an organic banana on the other. They look the same, so what's

the difference? The conventionally grown banana is going to cost less, but isn't organic food supposed to be safer? The conventional banana has probably had its fair share of chemically fertilized soil. The organic banana was grown with a natural fertilizer, such as compost.

Now, you're in the meat department of your local Vons, and yet again you see organic meat and conventional meat. They come from the same animal and are the same part, yet something has to be different about them to earn an organic sticker on it. The organic meat comes from livestock that is given organic feed and allowed to graze, under preventative measures. The conventional meat comes from livestock that have been given antibiotics and growth hormones. For livestock to be considered organic, it needs to have access to a pasture to graze. However, most large industries have found ways to get around this standard, by giving them only a window to look out of or a small square with one foot to move around in.

There is a common misconception between something being natural, and something being organic. Organic and natural are not the same thing. A “free-range” or “all-natural” label doesn't mean it's organic because in order to be organic, it has to achieve the USDA standards. Therefore, the reason it is called a “free-range” chicken is

probably because it cannot be labeled organic.

So, why should you buy organic food? Food is food, right? Well, there are some big differences between organic and conventional produce.

*\*But Not Really*

One of the major reasons people choose organic produce is because of pesticides. Conventional farmers use pesticides to ride their crops of molds, insects, and diseases. However, these pesticides are chemical based and frequently leave residue on plants. Even though the residue is under government threshold for safe eating, some of the chemicals are dangerous, and according to some, can even cause terminal illness. The USDA states that the difference in organic and conventional pesticide use is significant. Another reason organic produce is popular is due to food additives. Food additives include preservatives and any other artificial ingredients. Organic regulations have strict bans on food additives, which are normally added to a product during production. The environment is another large factor in this decision. Organic farming is said to have a better effect on the soil they use than the conventional farm. The pesticides and chemical fertilizers put into the ground often have a harmful effect on soil, which is creating an increasing lack of naturally rich soil.

Although organic food has been said to be healthier, there is no exact answer to whether or not that is true. Organic food is more expensive than conventional food, due to the more expensive farming practices. As a result of organic produce not being treated with preservatives or waxes, it spoils much faster. But what it truly comes down to is whether or not you want to be eating the chemicals, hormones, and antibiotics conventional food is grown with. If not, then the extra two dollars for a bunch of bananas is well worth it.



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# America's Disasterous Diet Change

by Avery Naughton

When our American ancestors arrived on the Mayflower, it can widely be conceived that they ate differently from most Americans today; obviously, they did not have superstores of frozen and pesticide-infused food. However, their food, although smaller in portion and variety depending on the season, was arguable healthier. Wild animals from nature, fish from largely unpolluted oceans

and streams, and vegetables that came straight from the dirt to the table were part of their daily diet. Over the past centuries, the American diet has transformed in many ways, not all of which are beneficial to our health.

A critical change in the American diet over the past 100 years derived from technological innovations. In the 1920s, the invention of the refrigerator allowed Americans



to keep meat and dairy products for longer periods of time. The impact on consumption of meat is shown by the American Journal of Clinical Nutrition which found that meat consumption has increased by 62%. Another key invention introduced in the 1920s was the commercial grocery store. With the move of many Americans to bustling cities, they abandoned their homes at the farm, where most food previously came from, and huddled to grocery stores which appeared as an easier and less-stressful way to obtain food. Grocery stores allowed people to choose from a wider variety of foods that were immediately available. However, as with current grocery stores, it was nearly impossible to track where the food came from.

The new American diet is less than ideal. The Center for Science in the Public Interest's "report card" of the American diet created by Bonnie Liebman shows unpromising results in most of our food intake. Now, as I well know, CCA students are terrified of grades less than an A, so shield your eyes if these results are too painful. I'll start with the highest mark on Liebman's list: a B+. Since in the 1970s, the consumption of fats and oils has increased. However, Liebman concludes that the good news about this is that margarines now have less trans fat. Meat, poultry, and seafood consumption obtained the solid score of a B, but Americans still consume more red meat than seafood and poultry combined. Positively, however, "beef hasn't been this low since the 1950s." Milk, receiving a B, has declined in consumption from the 1970s but 2/3 of Americans still drink milk that is not fat-free or low-fat. Fruit and vegetable consumption has remained stagnant since the 1970s, thus receiving a B-. The score of a C for Grains isn't much of a shock. We live in a busy world. Breakfasts comprised of bagels, toast, or cereal is easy, quick and not far from the norm. Snacks such as granola bars, the widely-consumed Chipotle burrito,

are far from the ideal whole grains we should be consuming. Our dairy consumption is even less promising, ranking a C-. This low ranking derives from our massive growth in consumption of cheese, starting from 8 pounds in 1970 to 23 pounds today. The worst grade comes, not surprisingly, from sugars. The average American consumes 78 pounds of sugar, and shockingly, this number has decreased from its peak in 1999.

This negative report correlates to some unsettling health risks that were once not major concerns of Americans. One major impact is the rate of obesity in America. In 1892, around the turn of the century, Stephan Guyenet reports that the United States government measured

**“Compared to our ancestors, Americans of today consume food on a much greater scale with many more potentially dangerous health strings attached.”**

obesity in white Caucasian males. The results found that less than 4% of these adults were obese. However, currently that rate is roughly 25% and increases with the increase in age.

The American diet has also introduced two controversial contributions: artificial sugars and high-fructose corn syrup. These fake sugars appear attractive to dieters as well as the American public as a whole because they have no calories. Although regulated by the FDA, artificial sweeteners still propose potential health risks. An example of the potential harm of artificial sweeteners is the increased consumption over the years of diet soda. The artificial sweeteners, according to The Huffington Post,

“trick your metabolism into thinking sugar is on its way.” These sugars confuse your metabolism and thus it slows down, leading you to burn less calories. Diet soda drinkers have also proven to have higher rates of diabetes than regular soda drinkers. This is specifically not good, as soda consumption has increased fivefold from 1945 to 2005. A key danger in high fructose corn syrup is that they are not recognized and processed the same way by the body as the cane sugar we once ate. Physician Mark Hyman concludes that the primary danger of HFCS is that they contain dangerous chemicals and contaminants. As Hyman explains, “besides the ginormous load of pure fructose and sugar found in HCFS, as an added bonus, it contains other chemical toxins.” Furthermore, he explains that the “chemical contaminants used during manufacturing” actually end up in our own food.

American eating habits have also changed in terms of buying habits of consumers. As Stephan Guyenet explains in his TEDxHarvardLaw talk, Americans are abandoning eating at home in turn for eating out or consuming fast foods. In his presentation, he concludes that at the turn of the century, 93% of food purchases made by Americans were made to eat the food at home. However, in 2009, a dramatic drop to 51% of food bought for the house indicates a rise in fast food and the restaurant businesses.

Compared to our ancestors, Americans of today consume food on a much greater scale with many more potentially dangerous health strings attached. Average Americans are arguably less healthy than they once were. The one thing we do know about the American diet, however, is that the trend of how much we eat and what we eat has evolved over time and is not very promising looking to the future.



by Timmy Chu

Since the term was first used in 1998, food companies have been on the search for the next big “superfood.” Superfoods are foods that are thought to be nutritionally dense and therefore good for one’s health, but have been criticized as solely a marketing term. They are supposedly a key to a long, healthy life and have been claimed to be powerful enough to lower cholesterol, reduce your risk of heart disease or cancer, and make you feel better throughout the day.

Over the past fifteen years, several different types of superfoods have emerged including blueberries, kiwifruit, beans, quinoa, kale, Swiss chard, collards, sweet potato and squash, salmon and other omega fatty acid rich fish, and most recently, acai berry, noni fruit, dragon fruit, rambutan, and pomegranate. These select foods have been deemed “superfoods” mainly because of their abundance of nutrients such as antioxidants, healthy fats, fiber, or phytochemicals.

Acai is one superfood that has stood out in San Diego over the last two years with the emergence of Sambazon Café in Cardiff-by-the-Sea in March of 2011. Sambazon specializes in the use of “the world’s finest ‘Amazon Superfoods’ to satisfy your mind, body, and spirit.” It has quickly become a trendy hotspot for surfers and high school students to hang out and enjoy one of their San Diego famous acai bowls or smoothies. Local surf legend Rob Machado has been known to stop

by and even has a bowl named after him: Machado’s PB & Banana Bowl. Machado isn’t the only celebrity to have his own bowl on the menu and is accompanied by (Bob) Burnquist’s Berry Bowl.

So why has acai taken the health world by storm?

Its antioxidant powers have been endorsed by the likes of Oprah Winfrey and Dr. Oz. Celebrity nutritionist Lindsay Duncan, a member of Dr. Oz’s “panel of experts” as well as “one of the world’s leading experts on superfoods, herbal medicine, natural remedies, and natural health,” posted a blog article on Dr. Oz’s website claiming acai to be the “next rainforest remedy.” Duncan claims that the berry’s “combination of antioxidants, amino acids, and omega fatty acids all help slow the aging process by boosting immune and metabolic function and removing destructive free radicals from our bodies.” While these claims may sound exciting and revolutionary, they are not backed by any strong scientific evidence. There is no doubt that the acai berry has many health benefits, but it is too early to claim any anti-aging qualities. One of the acai berry’s most beneficial nutrients is antioxidants.

Another superfood, kale has also been prominent in the San Diego

community. Kale is a leafy green vegetable and is claimed to be one of the healthiest vegetables on the planet. It is very high in nutritional values of beta carotene, vitamin K, vitamin C, and calcium. It also contains two carotenoids, lutein and zeaxanthin. Carotenoids are a type of a phytochemical that is essentially a plant pigment, giving many fruits and vegetables their bright, vibrant color. The two carotenoids found in kale are used by green, leafy vegetables to shield them from too much blue light. Studies show that too much blue light may damage our eyes so lutein and zeaxanthin are believed to be able to slow the progression of age-related eye damage.

Aside from potentially being beneficial for eye health, kale is full of vitamins and nutrients our body needs. One cup of chopped kale contains 206% of the daily value of vitamin A and 684% of vitamin K as well as almost the same amount of calcium as a cup of milk (~9%) and more vitamin C than an orange (134%). Kale has been praised for its wide range of uses in the kitchen as it can be added to soups, casseroles, salads, or even be used as a pizza topping. One of most popular forms of kale is the kale chip which can be easily made at home.

Nutrition is a major factor in San Diego’s sunny culture. The city is world renowned for its surf as well as fit, healthy citizens. The emergence of superfoods has played a role in the health of San Diegans as everyone wants to be as healthy as possible, and to do so, keep up with the latest health trends. Although the benefits of superfoods are not always concrete facts, there is no doubt that they have positive nutritional value and that the people of San Diego will continue to enjoy acai bowls by the beach.





# Veganism. Veganism? Veganism!

by Dani Lampitt

Being vegan is a lifestyle many people feel is appropriate for them. So what actually is veganism? When you're vegan you can't eat anything from an animal even if it doesn't directly come from eating an animal, such as all dairy products. Vegans chose their way of living and eating based on many more factors other than dieting. For most people, being vegan has to do with environmental issues, health concerns, and to help save the lives of animals.

Saying vegans chose their lifestyle to help the environment sounds crazy, but it isn't as outlandish as you may think. Animal agriculture takes a devastating toll on the earth. It is an inefficient way of producing food, since feed for farm animals requires land, water, fertilizer, and other resources that could otherwise have been used directly for producing human food. Why should we be feeding these large animals tons of food that could be feeding an entire continent? Also, animal waste from massive feedlots and factory farms is a leading cause of pollution in our groundwater and rivers.

Projections have estimated that the 1992 food supply could have fed about 6.3 billion people on a purely vegetarian diet. By being vegan you are unintentionally feeding more people than yourself.

A second main reason for people being vegan is for health purposes. The consumption of animals has led to many deadly diseases. Heart disease, colon and lung cancer, osteoporosis, diabetes, kidney disease, hypertension, and obesity has been linked to animal consumption. Vegan foods such as whole grains, fruits, vegetables, and beans are low in fat and contain close to no cholesterol and are very rich in nutrients and fiber. Many people say that vegans don't eat enough nutrients for your body to be healthy when really that is false. Vegans get most protein from beans, tofu and peanuts and more protein from grains such as rice, corn, and whole wheat bread and pastas. With the right diet, being vegan can provide all the necessary nutrients without eating animal products.

The third cause for most people choosing a vegan diet is to help animals. Commercially-raised dairy cows and egg-laying chickens, whether factory-farmed or "free range", are

slaughtered when they stop producing as much product. The more people that demand eggs and milk the more it will be supplied.

Like any other mammal, cows only produce milk when they are pregnant and stop producing when their calves have been weaned. At dairy farms when a cow delivers a female calf, they keep the baby and slaughter the mother. But when a dairy cow delivers a male calf, they sell the baby to a veal farm where it is killed within days of birth. Normally cows live 25 years but when they are dairy cows, they only live for five years.

On U.S. farms, hens are usually only alive for two years. But don't think these hens lived great lives because they didn't. They were stuck in cages, which were the size of one square foot. The bottom of the cages are wire which deforms their feet. After living a grueling 2 years in these cages they are slaughtered by suffocation, decapitation, grassing or even crushing.

One great company helping veganism is Hampton Creek Foods. Hampton Creek Foods is developing a plant-based substitute for the hen-born egg that's indistinguishable in taste and price from the real thing. Hampton Creek is one of several venture capital-backed startups trying to engineer dietary alternatives that are better for the planet and healthier for people—not to mention animals. They are creating eggless mayonnaise and even the eggless egg. Hampton Creek's egg substitute product is called Beyond Eggs. It's made from bits of ground-up peas, sorghum and a few other ingredients. In the year 2000 the global demand for eggs was 14 million tons, which is expected to rise to 38 million in 2030.

Another great alternative for vegans is almond milk. In the past soymilk was very popular but now almond milk and coconut milk are the biggest things. It isn't only better for you but tasted better. Being vegan isn't easy but a great substitute from dairy milk is almond milk.

Veganism is a very popular lifestyle for many people. Whether it is for health reasons, environmental issues, or just to save the lives of animals, it is an intriguing alternative way of living.



# Get Wasted

by Alyssa Kucera

In 2012, the Natural Resources Defense Council (NRDC) reported that up to 40 percent of the food produced in America goes uneaten. That same year, the U.S. Department of Agriculture (USDA) estimated that 14.5% of U.S. households (17.6 million households) were food insecure, meaning that one or more household members lacked access to enough food for a healthy and active life at some time during the year. In the U.S. alone, 49.0 million people, including 8.3 million children, lived in food insecure households in 2012. Globally, the U.N. World Food Programme estimates that about 842 million people, or nearly 12% of the world's population, suffer from chronic hunger, while a study by the U.N. Food and Agriculture Organization reported that nearly one-third of food produced for human consumption, approximately 1.3 billion tons per year, is wasted or lost.

In developing countries, food losses mainly result from limitations in infrastructure, including issues related to storage, transportation and distribution of food, as well as corruption in the food supply chain. By contrast, a large proportion of food losses in industrialised nations such as the U.S. results from the behaviour of consumers and retailers. Understanding and addressing the causes of food loss could significantly reduce hunger worldwide.

The 40 percent loss figure in the U.S. includes both food losses and food waste, which occur throughout the food supply chain. This total food loss amounts to 20 pounds of food per person per month, at a cost of \$165 billion dollars per year. The NRDC estimates that a 15 percent reduction in food losses would produce enough food to feed 25 million Americans every year. In addition, the problem of

food loss imposes substantial costs on the environment, in particular related to waste disposal and water usage.

Food losses refer to losses in the quantity of edible food that occur during farming and production, and in the post-harvest handling and processing stages. Food waste refers to losses that occur during food distribution, in retail and food service operations, household waste, and at disposal.

Food losses in production include damage due to pests and weather, as well as economic decisions not to harvest crops because low prices or labor shortages make harvesting

**“Retail food losses in the U.S. were estimated at 43 billion pounds in 2008, and account for more than 10 percent of the total food losses.”**

unprofitable. Approximately 20 percent of fruits and vegetables grown in the U.S. are lost during production. Losses during handling and processing result from rejection of ‘imperfect’ produce based on aesthetic considerations, such as size, discoloration, or blemishes that have no effect on nutrition, and on trimming of edible portions during processing. An example is the process of making “baby carrots” by trimming carrots that are too bent to sell into a smaller, regular shape. Distribution related losses occur during when perishable food spoils during shipment.

Retail food losses in the U.S. were estimated at 43 billion pounds in 2008, and account for more than 10 percent of the total food losses. Many of these losses are due to the practice of overstocking store displays and to consumer expectations of aesthetic quality. This results in products that have minor damage being discarded. Retail losses also include disposal of food having expired “sell by” dates and the disposal of ready-made food that is discarded at the end of the day. Similarly, restaurants waste a lot of food by providing excess portion sizes that is uneaten and in inefficient planning and preparation.

Household waste accounts for a large percentage of the total food waste and is the easiest place for individuals to make a difference. According to the NRDC report, U.S. households throw out about 25 percent of their food purchases, at an average estimated cost of \$1,600 per year for an average family of four. To test these numbers, I recorded all of the food my family threw away over a one week period. In our household, the largest category of wasted food was fresh produce, at 2,034 grams (4.5 pounds), followed by 1,560 grams (3.4 pounds) of leftovers (mostly grains/cereals), 270 grams (0.6 pounds) of meat, and 172 grams (0.4 pounds) of milk. Using average retail prices from the Bureau of Labor Statistics, the value of the discarded food was calculated to be between \$15 and \$20, for an estimated annual cost of \$780 to \$1,040.

A number of factors contribute to household food waste, including the relatively low cost and abundance of food in the U.S. which encourages wasteful behaviour, consumer confusion over label dates, spoilage due to improper storage and planning, and preparation of excess amounts that



are discarded instead of consumed as leftovers.

The issue of food labels results in a lot of confusion and leads many households to discard food prematurely. In a September 2013 article, the Los Angeles Times reported that more than 90 percent of consumers were confused by the manufacturer “sell by” dates, which are intended to help manage store inventory and do not indicate food expiry. In addition, while “use by” and “best before” labels indicate peak quality, they do not mean that products are unsafe to eat after the indicated date. This confusion results in the disposal of a large amount of edible food. The NRDC and others have suggested revising and standardizing the label system to make it more informative for consumers.

Food production also imposes a significant cost on the environment, which could be minimized by decreasing the percentage of food lost or wasted. The NRDC reports that food production accounts for 10 percent of the total U.S. energy consumption and agriculture uses 50 percent of U.S. land. More critically, 80 percent of increasingly scarce water resources consumed in the U.S. are used for food production. Thus, reducing food losses could also result in substantial savings in energy and water use.

The disposal of food waste in landfills also results in significant environmental impacts and contributes to global warming. Food waste is now the largest component of solid waste reaching landfills. During decomposition, rotting food is converted to methane gas, a powerful greenhouse gas. It is estimated that 23 percent of methane emissions in the U.S. come from the decomposition of waste food.

There are a number of fairly simple steps that can be taken to reduce the amount of food loss and food waste.

Production and distribution related food losses could be reduced in part by relaxing quality standards that are unrelated to nutrition, promoting local food distribution to minimize losses in transportation, donating excess production and providing tax credits or other incentives to encourage harvesting.

Retail losses can be reduced by better managing inventory, redesigning displays to reduce overstocking, and offering discounts near label-dates to encourage sale. Restaurants can revise their menus and portion sizes, and both groceries and restaurants can donate excess food that will otherwise be wasted to local food banks.

Household waste can be addressed by better planning of meals and shopping lists, so that the waste and expense due to spoilage and over-preparation are avoided. In addition to reducing waste generation, households can compost part of their waste to avoid disposal in landfills. Many cities have implemented curbside composting, where households separate compostable organic materials, such as food, from trash and recyclables, which preserves limited landfill space and saves money, as well as reducing greenhouse gas emissions. For example San Francisco has an established curbside composting system that collects 600 tons of yard and food waste daily.

According to the NRDC, raising public awareness of the humanitarian, environmental and economic costs of food waste, similar to the “reduce, reuse, recycle” campaigns that raised public awareness of recycling, could have a significant impact in minimizing food losses and reducing or eliminating food insecurity in the U.S.



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