The Journal of Values-Based Leadership

Volume 13 Issue 2 Summer/Fall 2020

Article 19

July 2020

Plant Power Fast Food (San Diego, California)

Susannah M. Larson susannahmlarson@gmail.com

Follow this and additional works at: https://scholar.valpo.edu/jvbl



Part of the Business Commons

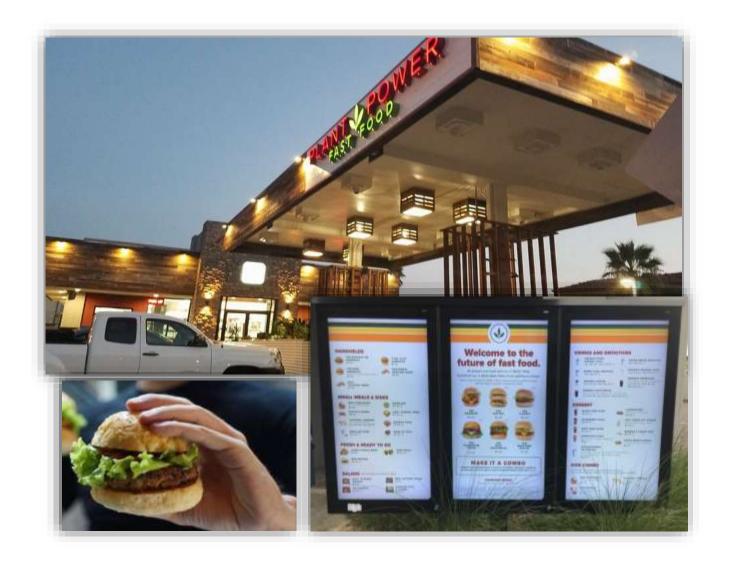
Recommended Citation

Larson, Susannah M. (2020) "Plant Power Fast Food (San Diego, California)," The Journal of Values-Based Leadership: Vol. 13: Iss. 2, Article 19.

DOI: https://doi.org/10.22543/0733.132.1333

Available at: https://scholar.valpo.edu/jvbl/vol13/iss2/19

This Case Study is brought to you for free and open access by the College of Business at ValpoScholar. It has been accepted for inclusion in The Journal of Values-Based Leadership by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.



PLANT POWER:

WELCOME TO THE FUTURE OF FAST FOOD

by Susannah Larson

Introduction

During a time when the world is facing unprecedented impact from Covid-19, the topic of meat consumption is perhaps more relevant than ever. With the virus linked to zoonotic factors and with many US meat processing plants designated coronavirus hotspots collectively threatening the supply chain (Wendy's restaurants, for example, in early May of 2020 experienced a shortage of fresh beef curtailing portions of its menu), now is a prime time for deep reflection on the benefits a vegan diet may provide. Preventing future pandemics may now be the fourth motivation incentivizing the meat-eating public to question their food

choices as the meat industry is also experiencing lower demand due to climate change, animal mistreatment, and human health factors. Paving the way to combat these issues yet allowing people to enjoy traditional US cuisine, is pioneer and entrepreneur Zach Vouga of Plant Power Fast Food (PPFF). He and his two partners, Jeffrey Harris and Mitch Wallis, have ignited a grand vision to provide classic fast food options such as burgers, fries, nuggets, and shakes, that are all vegan, plant-based, zero cholesterol, and free of GMO or artificially-flavored ingredients. The chain is flourishing in Southern California despite the challenges the pandemic has presented as this innovative team is proving that a company can attain financial viability and generate profits without compromising values, ethics, health, safety, or the environment: in other words, they are doing well by doing good.

Plant Power Fast Food

Founded in January 2016, with its first location in the Ocean Beach area of San Diego, Plant Power Fast Food began offering indoor and patio dining, take-out, and drive-up service similar to that of the "Sonic" restaurants. Fast forward to today, PPFF now has "more than \$7.2 million in funding [and has expanded] to seven restaurants and a mobile food truck operation in just four and a half years." This relatively new brand has done exceedingly well in weathering Covid-related market disruption and the company is currently on track to register brand-wide net sales of over \$12 million in 2020. As shared by CEO Vouga, "with three additional projects in development and more in the early planning stages, Plant Power has captured the attention of industry insiders by demonstrating the viability of a 100% plant-based brand in the fast-food market segment." To date, PPFF is the only chain of drive-through fast food restaurants in America that features a 100% vegan menu. Vouga reflects that while other purely vegan concepts exist, they need not be seen as competition as the global fast food opportunities represent a \$600-billion market share, so businesses with the shared mission of providing sustainable and cruelty-free food have plenty of room to join the movement.

Vision Statement

Plant Power not only acknowledges systemic issues and consequences behind a meat-based industry, but it actively wants to improve the nation's current standing on multiple fronts while appealing to a mass audience. As detailed by Vouga:

We recognize that a dietary model based on animal agriculture is inherently flawed: It causes unnecessary suffering for countless animals, is devastating to the earth's ecosystems and is the root cause of ill health and disease for an increasingly large portion of our human family. It's not enough to recognize the problem: We are committed to being part of the solution. By demonstrating the viability of a plant-based, cruelty free, environmentally sustainable and healthier alternative in the fast-food restaurant format, we seek to expose millions of consumers to convenient and delicious plant-based meals. We hope to inspire them to ask themselves important questions about their food choices and to begin to explore plant-based alternatives that can positively impact their own lives and the world we all share. While we're inspired by a vision for meaningful change, we don't preach: The food we serve and the love with which we serve it is itself the message.

Mission

In efforts to realize its vision, the PPFF team developed the slogan, "The Future of Fast Food." Vouga describes this as perfectly encompassing the current philosophy of an adapting world,

exponentially adopting a genuine interest towards veganism. He stated that the company's goal within the next 20 years is to be a nationwide chain, even global, while witnessing other fast-food conglomerates transition to plant-based options comprising a minimum of half of their respective menus. Vouga, who was featured on *Forbes's* List of "30 under 30 - Food & Drink 2020," explained that he and his partners aim to become "the vegan McDonald's." Even mimicking the well-known McDonald's Big Mac™ burger, PPFF has created a plant-based "Big Zac." derived from Vouga's name.

We are committed to being part of the solution.

He reflected that to reach the end goal, the company would act as a bridge between the stereotypical depiction of a vegan diet being limited to "just tofu and broccoli" and meet the desires of the masses by providing mouth-watering fast food fare. The business touts:

Delicious food first, vegan second ... [because] when delicious food becomes the objective messenger, people's mental wheels really begin to turn, and real change starts to happen.

Vouga explained that the Plant Power's motto "We're not just a restaurant, we're a revolution" aims to uphold the benefits plant-based food provides such as "99% less water, 93% less land, emit 90% fewer GHGEs (Greenhouse Gas Emissions) and uses 46% less energy than the food systems serving beef burgers" as seen in a Life Cycle Assessment conducted by the University of Michigan which compared Beyond Meat burgers to "a ¼ pound of U.S. beef" (Heller & Keoleian, 2018).

Industry Shifts

While deleterious consequences of meat-based diets and factory farming have been known for years, an exponential trend appears to be occurring with interest in veganism or at least with respect to a reduction of eating meat. Vouga reflects that 5 to 6 years ago, he would not have predicted the market for veganism to be as large, or as more widely accepted, as it is proving today though he acknowledged there was still a viable customer base to pursue his idea. With this in mind, Plant Power set out to appeal to "flexitarians" - people who, on occasion, eat meat or fish but primarily adhere to a vegetarian diet. Successfully drawing in a new audience, PPFF reported that 75% of its patrons are neither vegan nor vegetarian but simply looking to try something new that tastes delicious. As per Vouga:

We have countless stories of guests sharing that Plant Power was the impetus for their plant-based journey. For us, this is the proverbial icing on the cake. It's what we set out to do, and to see it manifesting is the most fulfilling feeling I can describe.

People around the globe are representative of this growing phenomenon, testing the vegan or vegetarian waters:

- In 2017, 44% of consumers in Germany follow a low-meat diet, which is a significant increase from 2014 (26%). Similarly, 6% of US consumers now claim to be vegan, up from just 1% in 2014 (Top Trend in Prepared Foods, 2017).
- More recently, Forbes's "The World in 2019" article claimed 25% of 25-34-year-old Americans now identify as vegetarian or vegan, and vegan food sales in 2018 rose "ten times faster than food sales as a whole."
- A recent report released by the US Bureau of Industry and Security estimated that the plant-based market would reach \$480.43 billion by 2024, with a projected combined annual growth rate of 13.82% from 2019 to 2024 (Nettle, 2020).
- Nestlé stated that "87% of consumers in the US, including vegans and meat-eaters, are including plant-based protein into their diets, and over 50% of consumers in the UK are reportedly following a flexitarian diet" (Nettle, 2020).

Impetus for Change

Climate Change

Shifting dietary decisions may be best explained by the immediate threat to the all global citizens and ecosystems, of the environmental consequences of factory farming, the name given to an industry which Merriam-Webster Dictionary defines as "a farm on which large numbers of livestock are raised indoors in conditions intended to maximize production at minimal cost." Factory farming has been shown to be a significant accelerant of climate change. Meat and dairy products consume 70% of global freshwater and consist of 38% of all land use (Gullone, 2017). Furthermore, these industries account for 14.5% of all greenhouse gas (GHG) emissions (Gerber, 2013), exceeding that generated from the entire transportation sector (Gibbons, 2016). Within the animal agricultural sector, beef accounts for the largest amount of GHG emissions followed by "milk, pork, poultry and eggs" in descending order (Harwatt, 2019).

The three most common GHGs attributed to this industry are carbon dioxide, methane, and nitrous oxide both directly into the atmosphere and through collateral means (Hayek, 2019). Of this, the direct emissions can be segmented into different contributing categories: enteric fermentation, or "cow burps," at 44% and manure management at 10%, as well as indirect emissions such as energy consumption at 5% and feed at 41% (Hayek, 2019). Meat products have the largest impact on the environment as the feed to meat conversion is extremely inefficient; it is estimated that 75-90% of energy consumed by the animals is solely attributable to body maintenance or is lost in their waste or by-products like skin and bone (Djekic, 2015). In fact, "Beef has one of the lowest feed-to-food conversion efficiencies of commonly consumed foods. Only 1% of gross cattle-feed energy and 4% of ingested protein are converted to human-edible calories and protein" (Gibbons, 2016). Researchers estimate that if consumers reduced their amount of meat intake to recommended levels, GHGs would be decreased by 29%, and a global vegetarian diet would yield a 63% reduction, hence alleviating many ecological threats (Gibbons, 2016).

Human Health

Once considered healthy by professionals, an animal-based diet is now producing opposite outcomes. Ostensibly, a paradigm shift has been occurring. Supported by empirical research, a plant-based diet has been proven to be more effective at preventing chronic diseases (Gullone, 2017).

Compared to an animal-based diet, vegetarian diets are associated with:

- Reduced risk of death from ischemic heart disease;
- Lower cholesterol levels;
- Lower blood pressure;
- Lower rates of hypertension;
- Lower prevalence of type 2 diabetes;
- Lower body mass index; and
- Lower overall cancer rates (Gullone, 2017).

Such identified benefits "are related to lower intakes of saturated fat and cholesterol and higher intakes of fruits, vegetables, whole grains, nuts, soy products, fiber, and phytochemicals" (Gullone, 2017). Switching to plant-based diets has even demonstrated measurable amelioration of certain forms of heart disease in addition to its prophylactic qualities in cardiac healthcare. Furthermore, some claim that a paucity of red meat in a diet correlates with a reduction of iron needed in a diet, however, such claim is spurious. In fact, plant ferritin is shown to be a source of iron abundantly available in plant-based foods (Gullone, 2017).

Aside from just meat-based foods, "egg consumption has been related to increased risk of a lethal form of prostate cancer among men" (Gullone, 2017), adding further support for veganism over vegetarianism. Another non-meat category that has been unfoundedly promoted as integral to human health is dairy products. In fact, data recorded over the last 20 years reflect that countries with high intake of animal protein, dairy, and calcium have some of the highest rates of osteoporotic bone fractures. There has been little to no support, when studying risk of fractures, that milk or dairy products improve bone strength. Conversely, such food options can negatively contribute to "risk of prostate and ovarian cancers, autoimmune diseases, and certain childhood ailments (Gullone, 2017). There is continued evidence showing harmful effects on people's health triggered from meat and dairy-reliant diets witnessed by increasing documentation of chronic diseases in developed countries that have transitioned to animal-based diets at an accelerated rate during the latter part of the last century (Gullone, 2017). Concomitantly, the number of factory farms has greatly multiplied over the last 4 decades within the US with 3,600 reported in 1982 to 20,000 in 2012 as reported by the Department of Agriculture and Environmental Protection Agency (Williams, 2018).

Animal Welfare

Wanting to ensure a sustainable future for the planet, the importance of our human-animal relationship must remain in a state of constant assessment. To prevent ecological imbalance and destruction, humans must acknowledge the reciprocal relationship that exists within the animal kingdom – the mutual reliance between the species – always realizing the deleterious consequences of financial exploitation. It is estimated that over 56 billion animals are killed annually for global food consumption, and that figure excludes fish and sea animals generally (Gullone, 2017). This figure does not include animals collaterally killed through other human activities such as deforestation or hunting. Mahatma Gandhi's famous statement still rings true: "The greatness of a nation and its moral progress can be judged by the way its animals are treated."

Most farm animals designated for slaughter are kept on Confined Animal Feeding Operations (CAFOS) where movement is severely restricted, often resulting in animal deaths, injuries, and stress. Many consumers are ignorant of these conditions - either by design or unwittingly. Many often disregard the disturbing details regarding animal treatment on factory farms and thus, are unfamiliar with grossly inhumane practices. For instance, pregnant mother pigs are locked in gestation crates that are minimally larger than their own bodies and their piglets' tails and teeth are removed without the assistance of pain relievers (Gullone, 2017). Dairy cows are modified to generate 10 times the normal amount of milk their calves need, causing painful injury to their ligaments and increased infections like mastitis; their offspring are removed soon after birth, prompting agonizing wailing in by their mothers who are reimpregnated shortly after being milked to capacity. This cycle is repeated as long as she is able to provide milk, living an average of 7 years while cows not seen as "profitable units" in factory farms typically live to about 20 years (Gullone, 2017). Male calves, as well as male chickens in the egg industry, are deemed waste products. Disturbingly, about 7 billion male chicks worldwide are killed annually, often within hours of being born. They are gassed or ground alive in mass groups. This method of culling occurs in all industrialized egg production operations, whether they are classified as free range, organic, or battery caged (Krautwald et al, 2018).

Many offspring, including calves and lambs, are also castrated or spayed and have their tails cut without use of anesthesia as most jurisdictions lack any specific laws requiring otherwise (Gullone, 2017). Other factory farm practices just graze the surface among the inhumane practices occurring in large factory farms let alone the overcrowding pens and cages or hormones injected as well.

As the 1990s witnessed the rise of animal activism and began to ignite overall societal concern about animal welfare, Ag Gags (legislative bills designed to silence whistleblowers from revealing animal abuses on industrial farms) began to emerge. This gave way to legislation including the *Animal Enterprise Terrorism Act of 2006* (18 U.S.C. §43), a US federal law that prohibits any person from engaging in certain conduct "for the purpose of damaging or interfering with the operations of an animal enterprise," thereby making it illegal to capture any pictures or video within a facility unless given consent by the owner. There have been some steps to curb abusive practices including several food suppliers that have initiated their own labeling or grading practices to distinguish products which allow consumers to be more aware of the conditions and treatment the animal received when buying a product. However, many organic, non-GMO, or cage-free/free-range products offered at stores such as Whole Foods, tend to be more expensive and limited in stock, therefore not easily accessible by consumers.

Zoonotic Pandemics

As of the current date, the official cause of Covid-19 has not been identified. However, the evidence strongly suggests a connection to food systems. In general, the likelihood of such zoonotic diseases spreading are increased as deforestation for commercial agriculture operations has precipitated greater human-wildlife interactions. Furthermore, "large-scale industrial livestock production creates the conditions for the propagation of zoonotic viruses due to the confinement of large numbers of animals in small spaces, narrowed genetic diversity, fast animal turnover, and habitat fragmentation through expansion of livestock production" (Richardson, 2020).

During the early months of the pandemic, the meat industry operations in several states became hotspots for many Covid-19 cases, also disrupting supply. In early May, it was



reported that meat processing factories were a major factor in states showing higher rates than other areas of the country (Gibson, 2020). This was supported by the U.S. Centers for Disease Control and Prevention in a report citing "at least 4,193 workers at 115 meatpacking plants in the U.S. have been infected with the coronavirus, and 20 of those workers have died" (Gibson, 2020). And this is more likely than not an underestimate as lack of testing may be obscuring true positive case numbers. In fact, the Midwest Center for Investigative Reporting reported that "as of

April 30 there have been at least 6,300 reported positive cases ties to meatpacking facilities in at least 98 plants, 28 states, and at least 30 reported worker deaths at 17 plants in 12 states" (Gibson, 2020).

Cass County, in the State of Indiana, reported the third highest number of confirmed cases behind Marion County/Indianapolis and Lake County, which sits closest to the Chicago, Illinois border. Cass Country is home to Tyson Food's pork processing plant and at one point in late April, the number of new cases accounted for almost half of the reported cases within the entire state (Bowman, 2020). Across the nation, plants either closed temporarily or were threatened to be shuttered; however, President Trump then signed an executive order mandating that meat processing plants should remain open even during the pandemic" (Gibson, 2020).

In May, CBS News reported "14,000 confirmed coronavirus cases linked to 181 meat processing plants across the U.S., with at least 54 employees killed by the virus. A large poultry plant in Britain is also at the center of a significant COVID-19 cluster with more than 150 confirmed cases" (Noryskiewicz, 2020). In mid-June, as Germany's numbers were previously subsiding, an outbreak with over 1,000 positive cases have originated from a German meat processing plant in the North Rhine-Westphalia's Gütersloh district, becoming "the largest local outbreak to hit Germany since the new coronavirus was first detected in the country on January 27" (Noryskiewicz, 2020).

In addition to the unnecessary risk of death and virus spread, there was a brief delay in grocery supply chains, however, those not reliant on animal products for their meals did not need to be concerned as most plant-based alternatives were left unaffected by the disease's spread. Reflecting on both the cost of lives and economic turmoil, moving towards a diet less animal-centric could also serve as a prophylactic step towards preventing or stalling future pandemics.

Unforeseen Path

Offsetting the deleterious effects of the meat and dairy industry by way of offering tasty alternatives to the public was not necessarily what Zach Vouga sought to achieve as a young

adult; though, he did have a special love for food. Growing up in the Midwest in a family of attorneys, Vouga saw himself following a similar path. He moved to Chicago for undergraduate studies in political science at DePaul University but paused before graduating upon realizing he was searching for a more purposeful existence. In 2010, circumstances led him to relocate to San Diego, California and soon took up a position at the first vegan fast-food drive-thru restaurant called Evolution Fast Food. Vouga recounts:

Through Evolution, I witnessed and felt first-hand the impact that a vegan restaurant possesses. The concept immediately clicked with me, and I was enamored with the potential that the concept had for social change, especially if scaled and proliferated across the country. Perhaps the most alluring aspect was that despite the long, physically demanding hours, it never felt like work. It felt more like I was getting paid to be an activist. I knew it was my calling and devoted my entire life force to creating Plant Power with my partners.

It was here he met the other co-founders of Plant Power, Mitch Wallis, the owner of Evolution Fast Food, and Jeffrey Harris. Soon thereafter, they began backroom discussions to develop



a revolutionary new brand, combining an all-vegan menu with sustainable materials, centered around the traditional fast food cuisine of burgers, shakes, fries, and sandwiches with which consumers have been most familiar and favor. "It would be a healthier, sustainable, and cruelty-free version of traditional fast food," said Vouga.

When building this initial concept, the three all agreed that the new venture would not be limited to one restaurant; they wanted to reach as many customers nationally, even globally, to yield the most systematic level of change. Before even raising their first dollar, they signed two leases within the same

period of time, knowing this would emerge as a chain restaurant. They wanted to be, and currently are, 100% debt-free and rejected any institutional lending as they began fundraising from family, friends, and other connections with a promised exchange of an investment return. In January of 2016, they opened the first flagship location in the Ocean Beach area of San Diego. Here, Plant Power Fast Food offered a variety of dining options including indoor, patio, take-out, and drive-up style service. Despite their lack of name recognition in the area, the company was overwhelmed by the local community response. In their first year, the company generated \$1.1 million and in 2017 almost \$2 million in revenue (Concepcion, 2018).

Upon this first restaurant's unveiling, fundraising for the second location began immediately. Ironically, this second restaurant opened in 2017 in Encinitas, California – formerly the venue of a Burger King – ideally symbolizing the paradigm shift occurring in the market wherein a sustainable plant-based eatery physically replaced the walls of a meat-dominated chain. This second location was also unique in that it featured a "living" patio wherein fresh vegetables and herbs are grown, intended for use in the restaurant's meals (Wills, 2017). Since then, the company has added 5 more locations in the surrounding region and has set up a food truck as well. In fact, the Fountain Valley location that opened in June, 2020, used to also be a Carl's Jr. restaurant, further demonstrating the industry trend.

The Grubby Details

While Plant Power Fast Food's goal isn't to advertise itself as a health-food restaurant, the company certainly can promote its options of being a healthier alternative to other fast food options of similar cuisine. Using wheat, pea, and soy proteins in addition to vegetables, non-GMO ingredients, and no artificial flavors, Plant Power's food items are a healthier version of options consumers tend to prefer, like burgers or nuggets. While calories may be comparable, Plant Power's menu offers similar or reduced sodium options other than the traditional meat version and the amount of protein is equal or sometimes even greater than other animal-

based fast-food products. Also, all fare on the menu is completely cholesterol-free.

When PPFF was first getting its footing, all of the food items were made inhouse as they procured their ingredients from carefully selected suppliers regionally. As expansion, initiated they however, they realized they could benefit by having one sole supply location, especially where they could make the sauces and more high-demand items. So, the group bought and now operates its own centralized food facility referred to as Plant Power



Commissary Kitchen in Escondido, California. This had given the company's owners more ease in opening new locations and control over food sources and methods of food preparation. All ingredients are "sourced from local farmers, natural food distributors and a direct relationship with manufactures" (Concepcion, 2018).

Responsibility Beyond the Meal

As PPFF's food itself is sustainable and environmentally responsible, what about the other elements that comprise an order? A typical trip to McDonald's also encompasses the use and waste of plastic utensils, plastic straws, wrappers, and boxes that end up in landfills in addition to a handful of napkins stuffed in the bag. At PPFF, all aspects surrounding the food experience are thoughtfully made to be more responsible. Vouga explained that all orders are served in biodegradable packaging, with recycled materials, and the utensils are solely created from plants. Furthermore, the company has goals of making the Long Beach/Los Angeles, California location to be completely solar-powered.

Plant Power's ethics also embrace social responsibility. "Most of our restaurant locations get involved with their respective communities on a regular basis, either in the form of fundraisers or donation drives when possible," Vouga shared. In fact, even while Plant Power had to endure its own adjustments due to the Covid-19 pandemic (limiting hours and payment methods, closing indoor and patio dining, utilizing third-party delivery services, and increasing online ordering with drive-thru, drive-up, and outdoor express counters), it also enthusiastically partnered with Support & Feed - an organization founded by Maggie Baird,

the mother of famous American singer songwriter Billie Elish. Together, Zouga reported they "supplied over 1000 meals to frontline workers in hospitals, homeless shelters, first responders and women's centers in the Los Angeles area."

Even more recently, the company has been highly supportive and active in the wake of the Black Lives Matter movement. Publicly acknowledging the country's battle against racial injustice, PPFF posted its own message of advocacy and pledged to donate 100% of its total profits from purchases made from all locations on June 6-7, 2020. The company published, "As a small business, this actually isn't easy for us. But easy doesn't always work. Sometimes, you've got to lean forward in faith and do something that's a little harder." This initiative was met with overwhelming response as the company reported record-setting sales and at some locations generated more than twice a normal weekend yield. In total, the company donated \$27,672.00 and equally divided the proceeds across four organizations at the forefront of fighting racial inequality: Black Visions Collective, NAACP, Beam Org, and Black Women's Health Imperative.

Reflecting on the company's desire to root itself in ethical and values-based practices, PPFF has attracted and cultivated a team of employees who strive to uphold such values, having aligned with many in the customer base. Vouga and his partners equally share the motivation to uphold these defining values, declaring what ethical leadership means to them:

Ethical leadership means putting the needs of the entire planet and all of its denizens way above your own; it means taking into account in every decision the impacts on the next 7 generations at the very least; it means 'Ahimsa' - do no harm; it means creating a win-win situation for everyone involved; all of the above are not only possible in every situation-but when you follow these precepts you succeed beyond your wildest dreams... but you must have faith, courage, and strength to follow these convictions no matter how much adversity, fear, and doubt are presented. — Mitch Wallis



For me, ethical leadership is ultimately the expression of a deep-seated conviction that everyone is worthy of being treated with the greatest love and respect. Not in some fake 'corporate mission statement' kind of way, but for real. So, that leads to the importance of intention. For me, that core intention is about being of service to others and to this beautiful world we all share. — Jeff Harris

The Future

With more than a stable base below its feet, Plant Power Fast Food continues to push the status quo and change the fast food industry's landscape. The restaurant chain has continued to gain new interests, both in terms of expanding its customer base as well as new financial entities looking to invest and fuel the growing company. Many articles regarding the company's success including the recent Forbes's "30 under 30 in Food and Drink" nomination has given the company increased validation, credibility, and awareness - drawing even more momentum. Plant Power hopes to focus on expanding its Southwest market in the U.S. next, with sights to include Las Vegas and regions in the Northwest within the next few years. Tackling nationwide expansion will also necessitate the development of different regional food commissaries, such as the company's current facility, and seek out and forge new relationships with different suppliers. While Vouga once may have doubted the level of openness to plant-based restaurants in areas like the Midwest, he sees and feels the tide turning and can envision it being a welcoming possibility sooner than once imagined. Hopefully, the clever act of changing habits, taste buds, and hearts and minds through delicious and innovative food may prove most effective in creating sustainable and dramatic change in the food industry, benefiting the nation's health, safety, and environment for generations to come.

References

Interview - Zach Vouga (May 19, 2020)

- Bowman, Sarah. (April 2020). Cass County Accounts for Nearly Half of New Coronavirus cases in Indiana Monday, *IndyStar*. Accessed 2 June 2020 from https://www.indystar.com/story/news/environment/2020/04/27/cass-county-coronavirus-cases-spike-county-home-meat-plant/3033246001/
- Concepcion, Mariel (September, 2018). Plant Power Fast Food Taps a Hunger for Change, *San Diego Business Journal*. Accessed 04 May 2020 from https://www.sdbj.com/news/2018/sep/17/plant-power-fast-food-taps-hunger-change/
- Djekic, Ilija (2015). Environmental Impact of Meat Industry-Current Status and Future Perspectives, *Procedia Food Science*, 5, 61-64.
- "Factory Farm," Merriam-Webster Dictionary. Accessed 14 April 2020 from https://www.merriam-webster.com/dictionary/factory%20farm
- Gerber, Pierre J., et al. (2013). Tackling climate change through livestock: a global assessment of emissions and mitigation opportunities. *Food and Agriculture Organization of the United Nations* (FAO).
- Gibbons, John (9 April 2020). Meat is madness: why it leads to global warming and obesity, *The Irish Times*. Accessed 29 April 2020 from https://www.irishtimes.com/life-and-style/food-and-drink/meat-is-madness-why-it-leads-to-global-warming-and-obesity-1.2602027

- Gibson, Kate (May, 2020). U.S. Meat Industry Seen as Source of Most New COVID-19 hotspots, *CBS News*. Accessed 2 June 2020 from https://www.cbsnews.com/news/u-s-meat-industry-a-top-source-of-new-covid-19-hotspots/
- GlobalData (June, 2017). Top Trends in Prepared Foods 2017: Exploring Trends in Meat, Fish and Seafood; Pasta, Noodles and Rice; Prepared Meals; Savory Deli Food; Soup; and Meat Substitutes. Accessed 14 April 2020 from https://www.reportbuyer.com/product/4959853/top-trends-in-prepared-foods-2017-exploring-trends-in-meat-fish-and-seafood-pasta-noodles-and-rice-prepared-meals-savory-deli-food-soup-and-meat-sub stitutes.html
- Gullone, Eleonora (2017). Why Eating Animals is not Good for Us, *Journal of Animal Ethics* 7(1), 31-62.
- Harwatt, H. (2018). Including animal to plant protein shifts in climate change mitigation policy: a proposed three-step strategy, *Climate Policy*, 1–9.
- Heller, Martin C. and Keoleian, Gregory A. (2018). Beyond Meat's Beyond Burger Life Cycle Assessment: A Detailed Comparison Between a Plant-Based and an Animal-Based Protein Source, *CSS Report*. University of Michigan: Ann Arbor, pp. 1-38. Accessed 24 April 2020 from http://css.umich.edu/publication/beyond-meats-beyond-burger-life-cycle-assessment-detailed-comparison-between-plant-based
- Krautwald J., M.E., Cramer, K., Fischer, B., Förster, A., Galli, R., Kremer, F., Mapesa, E.U., Meissner, S., Preisinger, R., Preusse, G., Schnabel, C., Steiner, G., and Bartels, T. (2018). Current approaches to avoid the culling of day-old male chicks in the layer industry, with special reference to spectroscopic methods, *Poultry Science*. 97 (3): 749–757.
- Nettle Laura (6 January, 2020). Five Major Trends Driving the Plant-Based Food Market. FoodBen: Business, Food, Industries, Innovation. Accessed 18 April 2020 from https://www.foodbev.com/news/five-major-trends-driving-the-plant-based-food-market/? cf chl jschl tk =6c34833e710b86b229edbec943f261a98dc48286-158939271 7-0-AX3jjJxFWu4Nnd4_0bSIV_Esj3Algt0DXgAfRdxFw5B3KYSaZUFISsjf5a3LxxpebGQP6D qnGy1o9P8o9znXm7peSqD8cGXVERTKbxzCdzyN-hMeEoyxuDj0x7dI701XxEyFySiLyR-3q ISZBMnE8EfgKVkaHQPeIAXvvFsNkWZZGjLltNDodmT2ot1hUHNl22-g3xXCLRm9z-P1A3W Kr4CMTjujw_152S2EQ3vJHEwxy6eXx0onYfBPtW93TF3JzwK5-zV3nP3Efx8LtTU2C1LqiG AXfNNIVm4L4HJk_jdxgwMW0bJNNig4dM4ab4ISj1zw3GWCi2bI5_Uoj08ZlosMtofrxBWNxq7kl-IJ4biO
- Noryskiewicz, Anna. (22 June 2020). Coronavirus outbreak at German meat packing plant drives virus reproduction rate back up. CBS News. Accessed 23 June 2020 from https://www.cbsnews.com/news/coronavirus-in-germany-meat-packing-plant-covid-19-outbreak-cases-r-reproduction-rate-up-today-2020-06-22/
- Parker, John (2019). The Year of the Vegan: Where Millennials Lead, Businesses and Governments Will Follow. *The Economist: World in 2019.* Accessed 04 May 2020 from https://worldin2019.economist.com/
- Richardson, R. (April 2020). Bending the arc of COVID-19 through a principled food systems approach. *Agriculture and Human Values*, 1-2.
- Williams, Carrie (2018). The Detriments of Factory Farming, *Undergraduate Honors Theses*, *Paper 462 East Tennessee State University*. Accessed 04 May 2020 from https://dc.etsu.edu/honors/462

Wills, Lauren (August, 2017). Sand Diego Burger King Replaced by Plant-based Drive-Thru. LiveKindly. Accessed 04 May 2020 from https://www.livekindly.co/burger-king-replaced-plant-based-drive-thru/

About the Author

Susannah Larson, MBA, is trained in business analytics and focuses her research interests in mental healthcare, socio/political equities, and sustainable businesses. She can be reached at susannahmlarson@gmail.com.