

Modernized or Industrialized

By: Emily Culbertson

The food industry has been seen as a common point in numerous debates as people formulate their opinions on what is wrong. The food industry is having problems whether it be how it is too expensive, not properly produced or producing enough, inhumane, and the list goes on. Michael Pollan's book *In Defense of Food* written in 2008 shows how nutritionism is not a scientific subject but an ideology and our ideas of nutrition are killing us slowly, especially with the concept of the Western Diet. Wendell Berry's essay "The Pleasure of Eating" (1989) primarily explains to the audience how we should be eating responsibly by understanding the connection between agriculture and eating thus allowing us to see food as an agricultural product rather than two separate concepts. Robert Kenner's film Food, Inc. (2008) addresses the problem that mass corporations have taken over all aspects of the food system from the growth of the product to the selling in chain restaurants and supermarkets. Tom Price's essay "Global Hunger" (2014) talks on the topic of the distribution of food being uneven throughout different countries and how we need to put more funding into anti-hunger legislation. A potential first step solution that connects all of the problems previously mentioned is to reevaluate the way food is produced. While it may be hard to make the switch, the food industry should switch from the industrialized technological farming we have now to modernized industrial farming which will keep the technology we know, but increase the nutritional value of the food.

Pollan's book was used as a way to inform the readers' of nutrition versus diets and the relationships that exist with food. Pollan states that, "by framing dietary advice in terms of good and bad nutrients, and by burying the recommendation that we should eat less of any particular actual food, it was easy for the take-home message of the 1977 and 1982 dietary guidelines to be

simplified as follows: Eat more low-fat foods” (51). When consumers are only told that option A is good while option B is bad, they will almost always grab option A. However, what if in reality option B was the better option since it provided more macromolecules, but it was deemed bad since there was too much of one of the so-called “bad nutrients”. Due to the misconception of bad nutrients and good nutrients numerous diets were formed that were not always as beneficial especially once we moved into the Western Diet which began in the 17th century. This diet is heavy in meat, white flour, vegetable oils, and sugar which results in very little fruit, vegetables, and whole grains. Pollan stated, “while the widespread acceleration of the Western diet has given us the instant gratification of sugar, in many people—especially those newly exposed to it—the speediness of this food overwhelms the ability of insulin to process it, leading to type 2 diabetes and all the other chronic diseases associated with metabolic syndrome” (113). Dermadi and contributor’s article, “Inherited cancer predisposition sensitizes colonic mucosa to address Western diet effects and putative cancer-predisposing changes on mouse proteome” written in 2014 also states that, “human epidemiology evidence and previous studies on mice have shown that Western-style diet (WD) may predispose gut mucosa to colorectal cancer (CRC)” (1). While this Western diet began making food cheaper and produced at a quicker rate it was detrimental to the consumers as the sugar rates increased causing health problems. Once the nutritionism of good versus bad was fully deployed the Western diet was being adapted and now the consumers are overall affected as we are now used to this style of eating. It causes the foods that lack nutritional value to be cheap and easy to obtain while the foods we should be eating are expensive and higher level commodities due to the concept of supply and demand as Berry explains.

Berry illustrates a connection between agriculture and their food thus providing the information that the consumer can be in control of the food process. He states, “they [consumers] think of food as an agricultural product, perhaps, but they do not think of themselves as participants in agriculture” (21). This statement opened his entire essay where he holds the consumer responsible for what they eat and the readers need to understand they are the consumer held responsible. We are not just eating what is provided but rather choosing what we eat; thus, as consumers, we drive the entire agricultural system and they will make what we buy. Due to what he previously stated, Berry mentions that “the consumer . . . must be kept from discovering that, in the food industry—as in any other industry—the overriding concerns are not quality and health, but volume and price” (24). We are indeed driving the industry, but as demand increases they see the dollar signs popping up above everyone’s heads. We go from people to profit and they realize that being unsafe in making the food allows them to increase the product quantity which is when the industrialized technological farming became more prevalent. Since we do not see the connection of food being an agricultural product they can do what they want in the agricultural industry while we are fighting to fix the food on our plates.

Food Inc. continues to educate the consumer on concepts they have not yet thought of or understood. Within the movie Joel Salatin states, “I think it’s one of the most important battles for consumers to fight: the right to know what’s in their food, and how it was grown” right after we watched a court case take place in the movie and we begin to see the green Earth with all of these different foods and the labels being hidden flash across the screen. He was an advocate for the fact that as consumers we need to see behind the concrete walls of the factory farms. When we are the ones purchasing the food we should understand the true price we are paying. Unfortunately, oftentimes when people become aware of these realities, the food industry will

pay to keep people quiet. Eric Schlosser states, “these companies have legions of attorneys and they may sue even though they know they can’t win just to send a message” which is said right after seeing Oprah’s reaction to getting sued by the food industry for a comment she made on her show and as the camera pans over a crop field. They are willing to pay to hide the problems we all notice rather than fix them. If we switch away from industrialized technological farming to modernized, where we keep the technology, but lose the overrefined qualities and mass production rates, we could remove some of this waste of money by decreasing the amount of money they are wasting on lawyers. They would be producing better products thus decreasing complaints and minimizing lawyer involvement. This would also be furthering what Salatin stated earlier where we need to fight for better food or even food on our plates.

Price stated that, “the FAO defines hunger, or undernourishment, as “not having enough food for an active and healthy life” or not being able to meet “dietary energy requirements””(675) which is used to explain the difference between hunger and those not getting enough to eat. Price states that, “experts say hunger has a number of causes, including war, poverty, population growth, poor farming practices, government corruption, ineffective food distribution, inclement weather, climate change and waste” (675). The public needs to understand that hunger gets affected on so many levels that there is not going to be a simple solution, but we can begin to take steps in order to reach a society where the three percent hungry and twelve percent not getting enough to eat will decrease. According to the “Money Minting Food Industry” article, “98 percent of the world’s hungry live in developing countries,” further proving that there are numerous reasons for hunger beyond lack of food. As we take the steps to fix this problem we do need to understand that as hunger decreases the percent not

getting enough to eat may increase for a short period of time, but in the end it should profit the people.

The 2012 film *A Place at the Table* directed by Lori Silverbush and Kristi Jacobson addresses the serious economic, social, and cultural problems caused by food insecurity. Silverbush and Jacobson explore the different forms of food insecurity and provide insight into the issues that come along with being food insecure. The film shows off three amazing stories about people experiencing food insecurity for different reasons and they do not all appear food insecure. Rosie, a 5th grader from Colorado was unfocused in school due to how hungry she was; however, she did not fit the visual image people tend to see when someone is starving. She was extremely undernourished, but since she was not skin and bone appearance-wise it was hard to tell. Barbie, a single Philadelphia mother who grew up in poverty and wants better for her children; unfortunately, she ends up making just a bit too much to be allowed food stamps, meaning her check has to stretch and is rarely adequate. Finally Tremonica, a Mississippi second-grader categorized as obese who is actually undernourished to a large extent. Caitlin Daniel's 2016 article "Economic Constraints on Taste Formation and the True Cost of Healthy Eating" connected to the film especially when she stated, "often, low-income respondents report that their children prefer energy-dense, nutrient-poor items. Even when these economically constrained parents may not want to supply such foods, many feel that they cannot afford to risk providing something that their family may not eat." (58). It is commonly seen in struggling families to find more obese children since they have a whole family to feed on a low budget.

The documentary, *A Place at the Table*, also discusses the issues of poverty in America. Within the film David Beckmann stated, "in our country we put a lot of emphasis on self-reliance on everybody fending for themselves, liberty and those are all great strengths, but as a

nation it has not been our strength to do what we can to reduce poverty". We have seen the problems in our society of how many people are hungry based on hearing about food stamps, seeing people garbage diving, and people begging for food or money. The general perspective is that people are expected to figure out how to get food on their tables on their own since we understand that everyone needs to eat. Dr. J. Larry Brown stated, "and we do in many ways, but our care is always predicated on the fact that we're worried that somebody else is getting something for free or something they don't deserve". Instead of understanding that people may need help feeding themselves we force them to remain self-reliant leaving numerous people malnourished. However, those that are eating are not eating as they should be. Bryan Walsh wrote an article "Getting Real About the High Price of Cheap Food" in 2009 where he stated, "for one thing, not all food is equally inexpensive; fruits and vegetables don't receive the same price supports as grains" (8). He showed throughout the article that since it costs less to produce more of the unhealthy foods they remain cheaper in stores. That can also be seen in Laska and contributor's article, "Agreements Between Small Food Store Retailers and Their Suppliers: Incentivizing Unhealthy Foods and Beverages in Four Urban Settings" written in 2018 of which states, "socio-economically disadvantaged areas tend to be concentrated with small food stores, convenience stores, and corner stores that offer limited healthy options" (1). The larger volume produced the cheaper the food becomes; this allows more people to purchase since industrialized farms are meant to make food at increased rates.

Ellen Gustafson's TED Talk "Obesity + Hunger = 1 global food issue" (2010) discusses the importance of understanding that food is the correlation between hunger and obesity. She wants us to provide more food aid which would use the revenue to profit the people purely. Theresa E. Gildner's 2020 article, "Intersecting Vulnerabilities in Human Biology: Synergistic

Interactions Between Climate Change and Increasing Obesity Rates”, states that, “increasing obesity rates and accelerating climate change represent two global health challenges shaped by lifestyle change and human environmental modifications” (1). This portrays that it is still a crucial and modern topic that Gustafson discussed in 2010. The TED Talk came to a similar conclusion as Price’s essay “Global Hunger,” as he also discussed that they need to provide food for everyone before the people can live a better life. Gustafson’s approach however is seen when she states, “and instead of taking these two things as bifurcated problems that are very separate, it’s really important to look at them as one system”. “Things” is mentioned by her in regards to hunger and obesity. She wants the audience to see that there is not a hunger problem and an obesity problem but a food problem that directly correlates to the problems of obesity and hunger. Gustafson states, “we all tend to think that these systems are quite different, and people argue whether or not organic can feed the world, but if we take a 30-year view, there’s more hope in collaborative ideas” when discussing her concept of The 30 Project. She wants to increase the food aid we offer in order to see a difference in thirty years, not right now. The significance of her entire discussion is that we need to see the combining factor of hunger and obesity and begin to solve the problem without expecting an immediate solution. She noticed that there is a correlation between what we eat and how productive we are. If we can begin to fix the problem now the next generation, approximately thirty years out, will demonstrate the significant changes of the food system. Thirty years really can change a lot, positively or negatively. According to the film, *Super Size Me*, “since 1980 the total number of overweight and obese Americans has doubled”. If obesity can double in thirty years, we can cut it in half in the same time. The process begins by reaching a plausible solution.

Price's states that, "paradoxically, the Earth produces more food than its inhabitants need, but the food is unevenly distributed" (675) after talking about the hunger crisis and those that are not getting enough to eat. This is an important aspect as it allows us to realize the problem is not our industries but the fact that we are not putting all the resources into the right places. The article "Why Have Americans Become More Obese" states, "the increase in food consumption is itself the result of technological innovations which made it possible for food to be mass prepared far from the point of consumption". Showing that we have more than enough for consumers to eat yet people are still starving. In regards to the resources being put into the wrong places, Price states, "consuming meat- and dairy- rich diets increases the cost of food by diverting food and land to feeding and raising animals" (676). The evidence demonstrates that we have the resources on Earth to fix the hunger problem, but we are using it in the wrong way.

We are feeding animals to eat said animals rather than eating the food beforehand. We increase the length of the process which increases the cost, as we need more employees and it takes more time; thus, it causes countries that make less to not be able to eat. Increasing the gap between the wealthy and poor countries connects back to Gustafson's comment on obesity and hunger being linked. The richer countries are eating more as the poorer countries are eating less. Price wants us to see the connections of food poor versus food rich and realize these food rich countries need to help the food poor countries decrease their hunger levels and begin to evenly distribute the food in order for the industry to properly profit the people.

The 2007 YouTube video "Story of Stuff" by Annie Leonard is a fact filled video addressing how our production and consumption patterns are flawed, which causes our worth to be measured by how much food we are able to consume. Leonard produced the video to show consumers how the eating habits they possess right now is killing the planet. Leonard stated, "we

are cutting and mining and hauling and trashing the place so fast that we're undermining the planet's very ability for people to live here". If we continue to lose focus on the eating habits we have of the food we can obtain, we are going to kill the planet. Kalle Lasn wrote the article "True Cost" in 2009 where she stated, "we calculate the hidden costs associated with products – what the economists nonchalantly refer to as "externalities" – and incorporate them" (3). It would be an ingenious way to help fix the planet as the environmentally sustainability would factor into the pricing. Leonard also states, "the primary way that our value is measured and demonstrated is by how much we contribute to this arrow, how much we consume". The quote once again loops into the previous concept of money being the connector between consumers and their food. In Freedhoff's 2014 article "The Food Industry Is Neither Friend, nor Foe, nor Partner" he states, "there is perhaps no message dearer to the food industry than that of 'balance', where balance refers to the importance of balancing energy input with energy output" (7). This is the way consumers are valued "worthy" and the more worth or money they push into the system the stronger their sway. The worth the consumer holds will influence the companies since as much as the worth of the consumer matters so does the worth of the company. A loss in revenue means a loss of their worth meaning they have to make the change.

There are a few plausible changes the industry could make within itself. Robert Paarlberg, author of the 2010 article "Attention Whole Foods Shoppers", stated, "not only is organic farming less friendly to the environment than assumed, but modern conventional farming is becoming significantly more sustainable" (146). This means that any new farming needs to avoid being totally organic but remain modern. This is the same concept as keeping the technology, but still also using traditional farming techniques. Thankfully, studies have been conducted about how to use modern technology in farming. Vinod Kumar Yata contributed to

the 2017 article “Nanoscience in Food and Agriculture: Research, Industries and Patents” where it states, “nanotechnology is finding revolutionary applications to improve agricultural and food systems, notably for better crop production and food preservation” . If we implemented modern technology it would allow traditional farms to be improved and have a higher productivity.

Quintin, author of the 2019 study “Active Biocompounds to Improve Food Nutritional Value”, stated, “summarizing, extraction of bioactive compounds from agricultural and food industry wastes has become a real tool to minimize environmental impact of organic wastes, to provide a new source of income, to improve the resilience of the sector in times of bad crops or commercial competition from third countries and even to create new social benefits (new jobs, gender equality, etc.)” (22). Organic farming is even still slightly plausible on a smaller level by changing the farming methods. If we add in bio active compounds organic farms would decrease in true cost by causing less damage to the environment.

The food industry is lacking in the value of the food they produce as nutritional values decrease and environmental damages increase. All these pieces of literature and films can agree on the concept that the food industry needs to find a solution. I recommend the switch of our style of farming. We already produce enough food that decreasing production rates to increase nutrition and environmental sustainability would be an option. If we use newer technology, but remove the mass production rates, we could create a food stable and environmentally stable society. We need to make some change in our method of farming in order to see any difference to the food system we criticize on a regular basis. Why not make a change that is plausible with minimal everyday impact while it stabilizes? Switching from industrialized technological farming to modernized industrial farming is a key solution to help our society improve our true cost of food which we are currently experiencing problems with.

Works Cited

A Place at the Table. Dir. Kristi Jacobson and Lori Silverbush. Perf. Jeff Bridges Tom Colicchio. Magnolia Pictures. 2012. DVD

Berry, Wendell. "The Pleasures of Eating." *What Are People For?* New York" North Point Press,

2000. *Food*. Eds. Brooke Rollins and Lee Bauknight. USA: Fountainhead Press, 2010. 21-28. Print.

Cutler, David M., Edward L. Glaeser, and Jesse M. Shapiro. "Why have Americans Become More Obese?" *Journal of Economic Perspectives*, vol. 17 no. 3, 2003, pp. 93-118.

Daniel, Caitlin. "Economic Constraints on Taste Formation And the True Cost of Healthy Eating." *Social Science & Medicine* vol. 148, 2016, pp. 34-41.

Dermadi, Denis., et al. "Inherited Cancer Predisposition Sensitizes Colonic Mucosa to Address Western Diet Effects and Putative Cancer-Predisposing Changes on Mouse Proteome." *The Journal of Nutritional Biochemistry*, vol. 25 no. 11, 2014, pp. 1196–1206.

Food, Inc. Dir. Robert Kenner. Perf. Eric Schlosser and Michael Pollan. Magnolia Pictures, 2008. DVD

Freedhoff, Yoni. "The food industry is neither friend, nor foe, nor partner." *Obesity Reviews*, vol. 15 no. 1, 2014, pp. 6-8.

Ghani, Shamsul. "Money Minting Food Industry." ProQuest, Mar. 2012

Gildner, Theresa E. "Intersecting Vulnerabilities in Human Biology: Synergistic Interactions Between Climate Change and Increasing Obesity Rates." *American journal of human biology*, vol. 33 no. 2, 2021, pp. 1–14. Web.

Laska, Melissa N., et al. "Agreements Between Small Food Store Retailers and Their Suppliers:

Incentivizing Unhealthy Foods and Beverages in Four Urban Settings." *Food Policy* vol. 79, 2018, pp. 324–330.

Lasn, Kalle. "True Cost Economics." ADBUSTERS: 15 Jul 2009.

Obesity + Hunger = 1 global food issue. Perf. Ellen Gustafson. TED Talks. May 2010.

Ted Talks

[\(https://www.ted.com/talks/ellen_gustafson_obesity_hunger_1_global_food_issue.\)](https://www.ted.com/talks/ellen_gustafson_obesity_hunger_1_global_food_issue.)

Accessed 23 November 2021.

Paarlberg, Robert. "Attention Whole Food Shoppers." Foreign Policy. June 2010. Rpt in *Food*.

Eds. Brooke Rollins and Lee Bauknight. USA: Fountainhead Press, 2010. 141-149.

Pollan, Michael. *In Defense of Food: An Eater's Manifesto*. Penguin Press, 2008.

Price, Tom. "Global Hunger: Can the Planet Feed Itself in 2050?" *CQ Researcher* vol. 4, no. 29, 8 Aug. 2014, pp. 673-96.

[cqpress.com/cqresearcher/cqresrre 2014080800](http://cqpress.com/cqresearcher/cqresrre/2014080800) Accessed 5 October 2021.

Quintin, D., et al. "Active Biocompounds to Improve Food Nutritional Value." *Trends in Food Science & Technology*, vol. 84, 2019, pp. 19–21.

Super Size Me. Dir. Morgan Spurlock. Perf. Morgan Spurlock. Hart Sharp Video, 2004. DVD.

The Story of Stuff. Perf. Annie Leonard. Free Range Studios, 2007. Storyofstuff.com. Accessed 23 November 2021

Walsh, Bryan. "Getting Real About the High Price of Cheap Food." *TIME* 21 Aug. 2009

Yata, Vinod Kumar, Bhupesh Chandra Tiwari, and Irfan Ahmad. "Nanoscience in Food and Agriculture: Research, Industries and Patents." *Environmental Chemistry Letters*, vol. 16 no.1, 2018, pp. 79-84.