

DESIGNING FOR CHANGE: USING COMMUNICATION DESIGN  
METHODOLOGIES TO RAISE AWARENESS ABOUT  
THE MEAT-EATING ECOSYSTEM IN AMERICA

by

Matthew B. Himes, B.A.

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Committee Members:

Claudia Roeschmann, Chair

Grayson Lawrence

Alvaro Soto

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## **DEDICATION**

I dedicate this thesis to the people who have provided unwavering support during my graduate education. First and foremost, I would like to thank my parents, Richard Himes and Dorothy Bassett, for raising me with the greatest love and care, for showing me that creativity is something to be celebrated and nurtured, and for always being there when I needed you.

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## I. INTRODUCTION

Meat has been a fundamental part of the human diet for as long as humans have existed—since our hunter-gatherer ancestors began consuming wild animals thousands of years ago. As advancements in technology have developed, the process of obtaining meat has continued to evolve as well, from the domestication of animals now considered “farm animals,” to the first cattle feedlots of the mid 1800s, to the factory farming system that exists in the U.S. today. The U.S. has long led the world in its consumption of meat, and as of 2009, the average American will eat about 222.2 pounds of red meat and poultry this year, according to the U.S. Department of Agriculture, surpassing a record set in 2004 (Jones & Haley 2018). This is largely due to economic factors, or as Mark Rosegrant, an economist with the International Food Policy Research Institute states, “All countries eat more meat when their incomes grow and they have the economic wherewithal to eat more meat” (Charles 2012). As the U.S.’s appetite for meat has continued to rise, so too have the issues and problems that plague our society’s current meat industry, from health and wellness concerns, to devastating environmental and ecological impacts, to weighty moral and ethical dilemmas.

### *Statement of Problem 1*

The source of the crisis is the increase of human power, which enables such a deep interference in the nature (...) that it can cause—if it had not caused them already—irreversible changes leading to the erasure of human existence both in physical, and specific sense (Ciężela 2006).

Prior to the 1950s, animal agriculture in America consisted of wide-ranging small farms that raised more than one species of animal on a farm. Beginning in the 1950s, the system

began to change into an intensively specialized system in which large numbers of animals of the same species were being raised in large industrial buildings. This commoditization of farm animals is known today as factory farming, and it has had significant societal impacts both positive and negative. According to the United States Agency for International Development, more than 800 million people across the globe go to bed hungry every night, and growth in the agriculture sector -- from farm to fork -- has been shown to be at least twice as effective in reducing poverty as growth in other sectors ("Agriculture and Food Security"). While its significant contribution to global food security cannot be ignored, this type of industrial-scale factory farming has also contributed to a host of environmental, public health, and animal welfare problems.

### *Environmental Problems*

Scientists agree that man-made climate change poses a threat to the planet and its inhabitants. Current data suggest that greenhouse-gas emissions need to be reduced in developed countries by at least 80% by 2050 in order to have a chance of staying below an average temperature rise of over 2°C (Woods et al. 2010). Animal agriculture is also an energy hungry industry accounting for approximately 7 percent of the total fossil energy burned in the U.S. (Pimentel 2006). Furthermore, it has been reported that up to 51% of worldwide greenhouse gas emissions can be attributed to livestock and their byproducts (Goodland and Anhang 2009), making industrial agriculture a significant contributor to man-made climate change.

According to the Merriam-Webster dictionary (2020), biodiversity is defined as "the variety of species of plants and animals in the world or in a particular habitat or ecosystem." Factory farming tramples (literally and figuratively) this biodiversity in a

variety of ways. The first is the deliberate destruction of forests and other land for livestock farming. As of 2011, approximately 45% of earth's global surface area is dedicated to livestock systems (Thornton 2011). This leads to large-scale displacement and in some cases extinction of native plant and animal species. Agricultural trade is also a major driver of tropical deforestation, which is the second largest source of anthropogenic greenhouse gas emissions and a major driver of biodiversity loss (Pendrill et al. 2019).

Another way factory farming contributes to decreased biodiversity is due to the large amounts of pollution it produces. Up to 15% of all animal agriculture methane emissions are released from massive “lagoons” used to store untreated farm animal waste (Mohr 2005). These lagoons release pollutants that destroy habitats, harm animal species, and in some cases can leak into pieces of land and water causing “dead zones,” or areas where hardly any species can survive. As of 2008, 169 marine areas have been identified as “dead zones”— up from 44 in 1995. One of the largest, found in the Gulf of Mexico, was estimated in 2002 to be the size of Massachusetts – 22000 square kilometers (Selman et al. 2008).

With so many animals packed into a single factory farming operation, vast amounts of feed are required to sustain and maximize growth of the animals. Producing this much feed requires a huge amount land and water. According to Gerbers-Leenes et al. (2013), “animal agriculture is responsible for up to 1/3 of all fresh-water consumption in the world today”. This added to the energy consumption not only of the operations themselves, but that is required to manufacture the fertilizer and pesticides needed to produce such large amounts of feed, then it becomes increasingly clear that the vast

amount of energy and resources required to produce a relatively small amount of meat equals a poor return on such a large investment.

*(Resulting) Human Health Problems*

Maximizing meat production often means concentrating a great number of animals in disproportionately small spaces, where production processes (fattening, milking) are automated at the expense of the natural functions of the animals. Because over-crowded animals are more susceptible to infection and disease, most industrial livestock facilities treat the animals with antibiotics to prevent illness and promote weight gain. By creating a breeding ground for antibiotic-resistant bacteria, the antibiotic dosages used on millions of factory-farmed livestock can reduce the effectiveness of antibiotics for human patients (Food & Water Watch 2010). In addition to concerns over antibiotics and other drugs in the food supply, keeping animals in such confined spaces produces more waste than can be absorbed into the land as fertilizer, which means vast quantities of excess manure ends up in the local environment, where it pollutes the air and water and endanger both the environment and human health in these areas. It has been shown that communities surrounding factory farm operations suffer from more severe pollution and an increased susceptibility to disease. (Sayre and Laura 2009). Johns Hopkins researchers have compared concentrated animal feeding operations (CAFOs) themselves to nightmare hospitals “where everyone is given antibiotics, patients lie in unchanged beds, hygiene is nonexistent, infections and re-infections are rife, waste is thrown out the window, and visitors enter and leave at will” (Sayre and Laura 2009). Furthermore, experts from both the UN and the European Food Safety Authority (EFSA) have pinpointed industrial animal farming as a starting point for emerging diseases, such

as Covid-19, which has killed more than 270,000 people worldwide as of May 2020 (Dalton 2020).

### *Animal Welfare Problems*

In addition to the public health and environmental concerns, another issue with the commoditization of farming has been the shift in priorities from addressing the needs of the animals to addressing the needs of the industry. Half a century ago it took an average of 70 days for a broiler chicken to reach weight for slaughter. By 2000, this was down to 47 days and the chicken is two-thirds larger than its predecessors (Marcus 2005). According to a report by the Animal Welfare Institute, animals are often tortured or maimed so they can be crammed into confined spaces and raised in unnatural settings, tails are cut off, horns are amputated, and beaks are sealed with a hot metal blade to prevent hens from pecking, all without any type of anesthesia or pain relief (“Inhumane Practices”). To maximize the use of space and minimize the need for maintenance, factory farms are notorious for encasing animals in pens that are too small for them to lie down, let alone graze (Solotaroff 2013). To prevent stress-induced behaviors caused by such extreme confinement, animals are often kept in semi-darkness, witnessing natural sunlight only when transported to slaughter (Bauston 1996). Dysentery, cholera, trichinosis, and other diseases are common, as are dehydration, respiratory diseases, bacterial infections, heart attacks, and other serious injuries. As Nancy Williams (2008) put it in her article *Affected Ignorance and Animal Suffering*, “In the end, it is fair to say that factory farming causes more harm to animals than does any other human institution or practice”. Philosophers have long debated the question of animal rights, but any

plausible theory will hold animals as sentient creatures capable of feeling pain and frustration, and as such deserve to be treated humanely.

### *An Unsustainable Model*

The United States Department of Agriculture reports that 9.59 billion land animals were slaughtered in 2018 (USDA 2019), and global meat consumption is projected to increase by 73% by 2050 (FAO 2011). This will result in an increased intensity of factory farming to meet this demand, leading to irreversible and unsustainable long-term consequences ranging from increased risk of contagion and drug resistant germs, to continued environmental destruction and animal suffering. The question asked is whether or not the benefits of industrial farming are worth the harm being caused to humans, animals, and the world, and if not, what can be done to bring about change.

### *Statement of Objective 1*

Given the realities of factory farming methods, what can explain the lack of action or even extensive public debate regarding these practices? One factor is the investment of animal agriculture operations in the current status quo. The industry makes blatant efforts to conceal the issue by placing facilities far from public view, sequestered from populated areas, and lobbying for agricultural gag legislation aimed at silencing and penalizing whistleblowers and suppressing/criminalizing undercover footage of animal abuse (“Anti-whistleblower ag-gag bills”). Alternatively, Nancy Williams suggests that “many people do not want to acknowledge the details of factory farming, and, in turn, they render themselves ignorant about the moral issues associated with this conventional practice” (Williams 2008). Addressing this attitude of willful ignorance about factory

farming conditions is one of the objectives of this thesis project, which will apply communication design methodologies to create a public awareness campaign designed to educate people about the unsustainable meat-eating ecosystem in the United States, to raise awareness about the truth of factory farming conditions, and to present a way to become part of the solution. Understanding these barriers is key to designing a communication strategy that will cut through the psychological barrier of willful ignorance and compel them to confront the realities of the food production industry and take action to help address the issues. While the efforts of other people and organizations to bring this issue to the forefront have undoubtedly been beneficial, this campaign will differ in its focus on utilizing communication design principles and design thinking to maximize the impact of the campaign's messages, not only raising further awareness about factory farming conditions, but also adding to the body of knowledge asserting that well-thought-out design can be an influential agent in raising awareness about important issues and affecting human attitudes and behavior.

### *Analysis of Potential Solutions*

Much debate has taken place regarding ideas for how to address inhumane factory farming conditions in the U.S. For the purposes of this thesis project and discussion, the researcher will be focusing on three primary schools of thought: dietary change, policy change, and technological innovation.

The first method for addressing factory farming conditions would be to for people to reconsider their dietary habits. According to the journal *Focus on Food, Trade and the Environment*, the input-output ratio for meat production is less than 13% (Shepon et al. 2016). This means that it takes approximately 10 calories of feed to produce 1 calorie of



chicken (the remaining calories of feed provide the energy required to keep the animal alive). The ratio only gets higher for pork (9%) and beef (3%). The dietary change that would provide the largest and most immediate benefit would be for humans to willingly stop eating meat and convert to vegetarianism/veganism. According to mainstream nutritional research by the American Dietetic Association, vegetarianism (including veganism) is acknowledged as a healthful diet that has advantages for the prevention and mitigation of various diseases (Position of the American Dietetic 2003). Considering the projected growth of the human population and damage caused by industrialized meat production, a large-scale switch to vegetarianism/veganism would seem to have the biggest impact in terms of freeing up vast amount of resources for future human generations, alleviating animal suffering, and improving American's health prospects. This type of dietary shift, however, would have additional health and economic impacts that are worth considering, such as the potential a reduction in intakes of certain micronutrients currently supplied primarily by animal-sourced foods such as Vitamin B12, Choline and Calcium (Chen, Canxi, et al. 2019), as well as ongoing questions about the nutritional adequacy of plant-based diets for developing children. In one case, a longitudinal study of vegan children from 1988 found that the majority of children grew and developed normally but they did tend to be smaller in stature and lighter in weight than standards for the general population, with Energy, calcium, and vitamin D intakes below the recommended amounts (Sanders, TA 1988). Additionally, a 2016 analysis in PNAS, Springmann and colleagues calculates that compared to a business-as-usual scenario for 2050, in a scenario factoring in a global shift to vegan and vegetarian diets,

not only was global mortality reduced by 6-10% but the savings in healthcare and lost work productivity came to \$1 trillion a year (Springmann et al. 2016).

While the moral case for vegetarianism/veganism as an alternative to consuming factory-farmed animals is strong, persuading most human omnivores to stop eating animal flesh is a challenging proposition. Many humans who have participated in meat eating all or most of their lives have a very difficult time letting go of that practice. However, rather than resorting to purely vegetarian/vegan diets, it may be a more realistic solution to encourage a more gradual shift from meat-intensive diets, to diets that are plant-based, where meat serves more of a complimentary role. Distinguished food writer/research Michael Pollan, in his New York Times essay “Unhappy Meals,” describes the ideal human diet using 7 simple words which have become of a rallying cry for people concerned about the food culture in America: “Eat food. Not too much. Mostly plants” (Pollan 2007). Pollan’s general thesis is that due to a variety of factors including government subsidies, policy decisions, and nutritionist theory, the typical American diet is not described by scientists and doctors as the ideal human diet and includes too much in the way of saturated fats, sugars, and other processed foods. This has led an alarming increase in heart disease, cancer, and diabetes among U.S. citizens since World War II, in contrast to other countries that consumed more traditional plant-based diets and had strikingly low rates of chronic heart disease (Pollan 2007). One reason to think shifting to primarily plant-based diets is a more realistic solution than vegetarianism/veganism, is that there is evidence of this shift. According to an FGI Research poll conducted in 2012, U.S. citizens are cutting back on meat, primarily because of concerns for their health. According to the poll results, “59% of respondents say they have cut back on meat in the

past year, with 62% of those reporting health as the primary reason they are cutting back or considering cutting back on meat” (FGI Research 2012). Given this evidence, it would seem that the most pragmatic way to impact the factory farming ecosystem may be to educate U.S. citizens about the benefits to human health, animal welfare, and the environment that will result from a shift in perception toward viewing meat as a supplement to plant-based diets rather than the centerpiece of a meal.

A second approach to addressing factory farming in the U.S. is the policy change approach, which addresses the issue from the perspective of the producer rather than the consumer. Considering all the facts and information available about the harmful impacts of factory farms, it might be expected that the government to step in with oversight and regulations. However, according to Mark Bittman, a respected food journalist and cookbook author, the U.S. government has traditionally acted in the interest of maximizing meat industry profits rather than protecting consumers from harm. Bittman likens the U.S. government’s efforts to a war against cancer, because of the federal government’s

“history of subsidies for the corn and soy that is fed to livestock, the nearly free pass they’ve given to the meat industry on environmental degradation and animal abuse, the unwillingness to meaningfully limit the use of antibiotics in animal feed, the failure to curb the stifling power the corporate meatpackers wield over smaller ranchers, as well as the refusal to tell American consumers that they should be eating less meat despite the advice of real, disinterested experts and scientific facts” (Bittman 2012).

And there is precedent for governmental involvement in addressing the issues associated with factory farming. The E.U., for example, has enacted robust anti-cruelty laws that establish welfare standards for farm animals and prohibit some of the most inhumane aspects of industrial livestock production. These directives apply to all member states, and include laws regulating how animals are housed, prohibit procedures that maim the animals, regulate animal transportation, require that all animals be rendered unconscious prior to slaughter, and advocate that all members will “since animals are sentient beings, pay full regard to the welfare requirements of animals” (Stevenson 2012). Rather than addressing the issue head on like the E.U., the U.S. government has traditionally delegated this responsibility to state governments. This has resulted in Agricultural-Gag laws designed to prevent undercover investigators from reporting on animal enterprises, which typically have weak anti-cruelty provisions and provide greater protections to companion animals like dogs and cats while neglecting protections for farm animals (Woodhouse and Leighton 00:03:45). While policy changes are needed and could do a great deal to address the issue, based off the government’s recent track record and the amount of financial investment in the status quo, attempting to initiate change through political policy would likely be met with resistance, and may not be the most efficient approach.

A third proposal for reducing the negative impacts of meat production in U.S., and the one that will be the focus of the future explorations section of this thesis project, lies in the realm of technological innovation, specifically plant based meat and an emerging technology called cultured meat, where animal tissue is grown in a laboratory environment and does not require the growing and slaughtering of animals. This

technology is currently in the research stage, and though small amounts of cultured meat are produced today, large scale production still requires more research. The potential benefits of this technology, however, are broad and far-reaching. According to a 2011 analysis by Hanna Tuomisto at the University of Oxford and Joost Teixeira de Mattos at the University of Amsterdam, cultured meat could require up to 45% lower energy use, emit up to 96% less greenhouse gas emissions, use 99% less land, and up to 96% less water than traditionally produced meat (Tuomisto and de Mattos 2011). In addition to these significant environmental impacts, cultured meat production uses no antibiotics since there are no animal health issues caused by close quarters confinement and has the potential to be enhanced with additional nutrients to provide further health benefits. While cultured meat offers many tangible environmental, health, and ethical benefits, no new technology is without risk and controversy. For the emerging cultured meat industry, this takes the form of the to-be-determined carbon footprint that mass production would leave, its relatively unknown nutritional composition, and the long-term effects of the sort of cellular manipulation that takes place in the development process (Chriki and Hocquette 2020). An additional challenge to bringing cultured meat to market, is that although the research indicates that it offers a healthier, more sustainable, and more ethical alternative to traditionally raised meat, a perception exists that it is unnatural, creating a barrier to public acceptance (Harris 2016).

### *Statement of Problem 2*

In addition to raising awareness about the unsustainable state of animal agriculture in the U.S., the second problem this thesis seeks to address is the general public's negative perceptions of lab-grown meat products. A study published in 2016

titled “Attitudes to *in vitro* meat: A survey of potential consumers in the United States,” found that, in comparison with farmed meat, respondents felt that in-vitro meat was “less natural, less appealing, and less tasty than farmed meat (Wilks and Phillips 2017). In a February 2016 podcast with Sam Harris, Uma Valeti, founder of Memphis Meats, a company at the forefront of cultured meat research and development, stated that perception (in addition to funding and scaling), was one of the three biggest hurdles to bringing cultured meat to market (Harris 2016). He argued that if people were educated about the ways in which cultured meat is actually more natural than traditionally farmed meats because it hasn’t been subjected to the type of genetic and environmental modifications (antibiotics, growth enhancements, intensive factory farming conditions), they would willingly switch to eating cultured meat if it were available (Harris 2016). In fact, just recently in December of 2020, the first no-kill, lab grown chicken was approved for sale by the Singapore food agency, paving the way for a future where more of our meat is produced without the killing of livestock (Carrington 2020).

### *Statement of Objective 2*

In addition to creating a campaign to raise awareness about the unsustainability of farmed meat, the second phase of this thesis will be to outline a concept, including communication strategies, design recommendations, and messaging ideas, for a secondary campaign aimed at addressing the hypothesis that negative perception is one of the major hurdles to the widespread acceptance of cultured meat in America. To do this, evaluations will be used and conclusions drawn from the initial campaign to determine what messaging and design strategies would most effectively resonate with the audience.

## II. PRELIMINARY RESEARCH

In order to design effective campaigns for any issue, it is important to first understand past campaign efforts with similar goals of altering consumer attitudes and behaviors around a particular issue. By analyzing comparable campaigns, my goal was not only to obtain creative inspiration for my own designs, but to gain insight into how the teams behind these campaigns were able to fuse together variety of different factors to make their endeavors successful. These factors include but are not limited to: understanding their target market, coming up with effective messaging to reach said market, determining an effective strategy for design and visual imagery, selecting the most effective communication channels for their messaging, and executing the campaign in a cohesive and actionable way.

### *Case Study 1 – Truth Campaign*

Truth Initiative is a national public health organization whose goal is inspiring tobacco-free lives and building a culture where all youth and young adults reject tobacco. It is recognized as one of the most successful and one of the largest national youth tobacco prevention campaigns, and it focuses on exposing the tactics of the tobacco industry, the truth about addiction, and the health effects and social consequences of smoking. According to their own mission statement, the campaign has helped drive down the youth smoking rate from 23% in 2000 to 4.6% in 2018, and prevented millions of young people from becoming smokers, including 2.5 million between 2015 and 2018 alone” (Truth Initiative, n.d.).

In order to accomplish the goal of changing social norms and reduce youth smoking, the Truth campaign looked to social science research, and engaged in

conversations with teens in the form of regular surveys in order to better understand and more effectively reach target market segments (Florida ‘Truth’ Campaign). This comprehensive understanding of the audience resulted in a media strategy designed to reach youth and young adults across multiple platforms with messages focused on showcasing the various negative consequences of smoking as well as the duplicity and manipulation exhibited by tobacco companies (See Fig. 1 and 2).



**Figure 1.** Truth. *It's a Trap: Social Smoking is Smoking*. 2015. Digital Advertisement. Ad exemplifying Truth's efforts to target youth with their campaign materials.



**Figure 2.** Truth. *Tobacco use is not an equal opportunity killer*. 2017. Infographic. Truth calls out tobacco industry for profiling disguised as target marketing.



The strategy of this campaign draws from the *Behavior Change Theory*, which explains behavioral choices as a function of attitudes, perceptions, social norms, and intentions related to the behavior (Ajzen 1991). Thus, attitudes and beliefs towards tobacco use are theorized to directly influence intentions to smoke, which in turn influence smoking behavior (McMillan and Conner 2003). Based on this theory, a message architecture was developed that focused on reducing the acceptability of smoking, encouraging young people's independence from tobacco, building anti-tobacco industry sentiment, and encouraging youth to join a social movement to end smoking (Vallone et al. 545). By concentrating its messaging in these areas, the Truth campaign was able to effectively encourage a shifting of cultural and attitudinal norms, which helped produce the positive behavioral changes that they were looking for.

Another interesting aspect of the Truth campaign is its utilization of anger and aligned audiences as forces of behavioral change (See Fig. 3).



**Figure 3.** Truth. Times Square anti-smoking advertisement. n.d. Billboard Ad. Ad exemplifying Truth's utilization of anger as a force to motivate behavioral change.

According to a study in Family & Community health titled “The Relationship Between Advertising-Induced Anger and Self-efficacy on Persuasive Outcomes: A Test of the Anger Activism Model Using the Truth Campaign,” “aligned audiences,” or audiences “who’s attitudes and behaviors already align with the public health or antitobacco message” can be vital to the success of public health campaigns because they can become influencers (Ilakkuvan 2017). In this study, the author outlines a fairly new theory called the Anger Activism Model that helps articulate the process by which aligned audiences can be leveraged to take action for a particular cause. The Anger Activism Model theorizes that anger can have a robust impact on attitudes, decisions, and behaviors because “experiencing anger communicates that something in the environment is wrong, motivating individuals to remove obstacles blocking goal attainment.” After testing the Anger Activism Model using several Truth campaign advertisements, Ilakkuvan concluded that there was an increased receptiveness to and cognition of advertising that induced anger, and that “health promotion practitioners should explore the use of anger in persuading audiences to change their health-related attitudes and behaviors” (Ilakkuvan 2017).

There are several aspects of its strategy and execution that can serve as an inspiration for this proposed thesis project. These include the Truth team’s empirical approach to understanding their audience, their strategic selection of communication channels to reach that audience, their appeal to attitudes and emotions (particularly anger) in their messaging, their focus on easy to understand yet impactful facts, and their effort to make people feel like they are a part of a larger social movement. While there are key differences between a campaign for tobacco awareness vs. one for animal agriculture

awareness, understanding the theories and methods that made the Truth campaign successful to apply them to this proposed thesis project will only help to increase its effectiveness.

### *Case Study 2 – Trash Isles*

Trash Isles was created by ad agency AMV BBDO in June 2017 in partnership with LADBible and The Plastic Oceans Foundation. An application was submitted to the UN on World Oceans Day to recognize the Trash Isles – an area of rubbish in the ocean the size of France - as an official country. The overall goal being to force a conversation around the issue of plastic pollution in the oceans, and to compel the international community to clear it up. According to the Montevideo Convention on the Rights and Duties of States, there are four requirements to become an official state (1933). First, define a territory. Trash Isles claimed all the plastic in the North Pacific Ocean as their territory. Second, form a government. Trash Isles established a monarchy and appointed Dame Judi Dench as queen. Third, be able to communicate with other states. The PR, social media, and advertising of the campaign covered this. Finally, establish citizens. The campaign recruited citizens from the public by asking them to sign a Change.org petition urging the UN to recognize Trash Isles as an official country. The design team created a country flag, depicting a plastic bottle bobbing in the ocean, a currency system depicting the effects of ocean trash on wildlife, as well as custom passports, stamps, and other collectibles for newly minted citizens. (See Fig. 4). The Trash Isles campaign went on to win two Grand Prix prizes (for design and PR) at the prestigious Cannes Lions awards in 2018 (Anderson 2018).



**Figure 4.** Campaign Elements for *Trash Isles*. n.d. Mixed Media. The Flag, passport, currency, and stamp designs for the Trash Isles anti-littering campaign.

According to creators Michael Hughes and Dalatando Almeida, “We wanted to come up with a way to ensure world leaders can’t ignore it anymore, a way to stick it under their noses, literally. (Rachael 2019). To date, the campaign has reached over half a billion people worldwide, including 50 million video views, over 225,000 citizens joined, including environmental icons such as Sir David Attenborough and Al Gore (Anderson 2018).

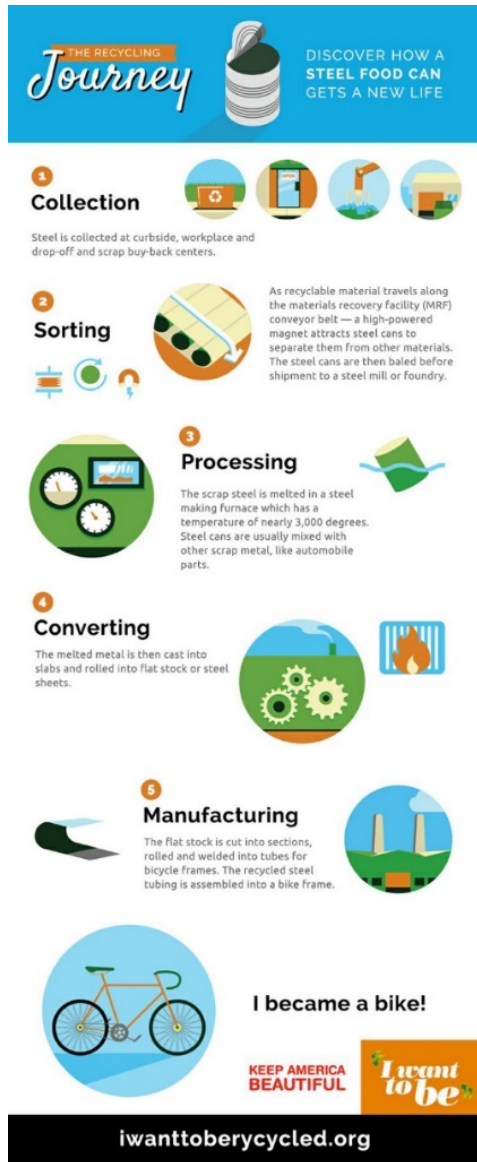
On the spectrum of public awareness campaigns, Trash Isles occupies a unique place due to its innovative approach. Applying for and receiving nation status for a floating pile of garbage was such a surprising and attention-grabbing idea that it became a news story in and of itself, and awareness was generated simply by people finding out it existed. To combine that awareness with well-conceived design elements and the

presence of influential volunteer ambassadors, and it's easy to see how the campaign quickly went viral and became one of the most memorable environmental campaigns in recent years. In terms of how the success of Trash Isles could be applied to this research, several key takeaways need to be looked at, the first being the power of an innovative idea. The notion that people will take notice of a truly inventive idea, and through word-of-mouth transmission, that idea will begin to take on a life of its own. Trash Isles was such an original concept that the public began to take notice, which in turn drew the attention of the press, and ultimately accomplished the campaign's aims of increasing public awareness of the problem. Another outcome from Trash Isles that can be applied to my own research is the effectiveness of perceived social contracts at spurring action among consumers. By asking people to join the Trash Isles nation, they were inviting people to become a part of something larger than themselves, who would therefore become personally invested in the movement. One of the most difficult aspects of creating a successful campaign is the question of how to turn passive viewers into active participants willing to take real action for a cause. Creating this type of social accountability keeps people feeling personally connected to the movement and compels them to maintain and often increase their involvement. The last point about Trash Isles that could influence this project is the idea of utilizing influential ambassadors to help lend credence and affirmation to a campaign's message. In this age of social media it's easy to see the power the influencers can hold. In the case of Trash Isles, however, getting the particular people — Attenborough and Gore — that, due to their impeccable reputations on the environment, could lend the most credibility to the cause, provided a

massive boost in public awareness, and by harnessing their influential words, helped Trash Isles become the major success story that it is today.

### *Case Study 3 – I Want to be Recycled*

Americans recycle an average of 1.5 pounds out of the 4.4 pounds of trash they produce daily, which totals more than 250 million tons of trash a year, and national recycling rates continue to hover at 34.5 percent, according to the “National Overview: Facts and Figures on Materials, Wastes and Recycling” (Environmental Protection Agency 2018). Created by San Francisco-based ad agency Pereira & O'Dell, the *I Want to be Recycled* campaign is targeted to motivate Americans to recycle every day and shows that recyclable materials can be given another life and become something new if someone chooses to recycle. The campaign directs audiences to [IWantToBeRecycled.org](http://IWantToBeRecycled.org), a website which includes an interactive game on recycling and comprehensive information on recycling throughout the home, information on which products to recycle, how to recycle products and what the products could potentially transform into when recycled properly, as well as infographics and detailed information on how to find a recycling facility nearby (See Fig. 5).



**Figure 5.** Recycled Glass Bottle Infographic. n.d. Digital Image. An example of the infographic approach used in the *IWantToBeRecycled* campaign.

The campaign also utilized television, radio, outdoor, online, social and mobile advertising all directing people back to [IWantToBeRecycled.org](http://IWantToBeRecycled.org), and distributed the campaign’s educational materials to schools and other civic organizations to increase awareness about the benefits of recycling (“City of Austin” 2014).

According to a report by Keep America Beautiful, “From July –September 2014, the average pounds of household recycling per household were higher compared to the

same time period in 2013,” and there was a “statistically significant increase in the percentage of respondents saying that recycling is a major way to reduce wasteful use of landfills and that recycling creates opportunities to make new products, the core focus of the PSA campaign” (Pulley 2015). So, what was it about the *I Want to be Recycled* campaign that made it a success? According to Brenda Pulley, Vice President, Recycling at Keep America Beautiful,

This campaign is the emotional push needed to raise awareness and positively change people’s behavior to recycle more. The core idea is to tell people to recycle and give their garbage another life. Showing that a bottle has dreams seems like a very powerful yet delicate way of doing it. (2013).

Eliciting this type of emotional connection is central to the success of the *I Want to be Recycled* campaign. On its surface, it’s hard to imagine people emotionally connecting to a piece of garbage. However, the creators of *I Want to be Recycled* managed to do just that. By helping people to imagine their garbage as having a potential second life other than sitting in a landfill, they were able to successfully anthropomorphize people’s garbage, and in turn inspire them to take action to ensure their recyclable products get a chance at their second life (See Fig. 6).





**Figure 6.** Advertisement from the *IWantToBeRecycled* Campaign. n.d. Billboard Ad. An example of the *IWantToBeRecycled* campaign's strategy to effect change by eliciting emotion.

This exemplifies the power of emotion has in dictating human behavior, which is something that could prove useful when developing the messaging for this project.

The second takeaway from *I Want to be Recycled* is the overall structure of the campaign, with everything funneling into a website called [IWantToBeRecycled.org](http://IWantToBeRecycled.org), which serves as the primary information and education hub for the campaign. The main goal was to diversify their approach by advertising online, on tv, on social media, and in public spaces, targeting a broad variety of demographics for maximum impact, while keeping the messaging on all those channels simple and straight forward. The true substance of the campaign lies in the information available on the website, where people who have been motivated to act can find what they need to change their recycling habits. This campaign structure seems particularly applicable to this proposed thesis project, as the educational approach and the need for people to be able to easily access, verify, and learn new information is easily accessible. The proposed campaign will follow a similar approach, utilizing a diverse range of communication channels to direct people back to a single information center to offer learning opportunities about the benefits of cultured

meat, and to be presented with easy ways to take action and start changing individual habits.

#### *Case Study 4 – KLM Fly Responsibly*

Another industry with concerns about its effects on the environment and its ability to create a sustainable future is the airline industry. According to a report by the Center for Biological Diversity, aircraft emissions are projected to more than triple by 2050, which amounts to more than four percent of the world's entire remaining carbon budget (the amount of pollution that can still be emitted before catastrophic planetary warming becomes virtually certain) (Pardee 2015). As air travel continues to expand worldwide, Dutch airline KLM (Royal Dutch Airlines) created their “Fly Responsibly” campaign to try and address the issue (See Fig. 7).



**Figure 7.** Advertisement for Royal Dutch Airlines *Fly Responsibly* Campaign. n.d. Digital Image. An example of the messaging behind KLM's *Fly Responsibly* Campaign.

The idea behind the campaign is to encourage people to voluntarily reduce their air travel. To accomplish this, they are urging customers to do three things. First, they ask

people to consider alternative means of travel such as trains. Second, they encourage passengers to pack lightly, without increasing luggage fees to offset the cost. Third, they urge customers to purchase carbon offsets to help offset the cost of the carbon footprint of their air travel and provide a free and easy-to-use online tool for to help them do so. On first glance into this campaign, one might ask, “won’t encouraging people to fly less cost them money?” In the short term that may be the case. However, there are several ways in which this sort of action may actually benefit KLM. These include being proactive about impending regulations, and more importantly the idea that any short-term economic damage will be offset by long-term reputational gains. Through this campaign, KLM is expecting to establish a reputation as a leader in environmental responsibility among airlines, and to position themselves to maintain a larger market share and gain an edge over their competitors as environmental considerations become increasingly important to airline customers.

The other aspect of KLM’s Fly Responsibly campaign that may have larger implications for other campaigns of this sort is the psychological component, or the idea of nudging as opposed to nannying. Cass Sunstein, founder and director of the Program on Behavioral Economics and Public Policy at Harvard Law School, defines nudges as “choice-preserving approaches that steer people in a particular direction, but that allow them to go their own way” (Sunstein 2014). Preserving the element of freedom-of-choice is key, as opposed to the idea of nannying, which is characterized by a lack of trust in individuals to make informed choices, for example the government reducing access to sugary drinks in schools to attempt to address the public health crisis/obesity epidemic. According to Sunstein, nations all over the world have become keenly interested in

nudges, because “they usually impose low (or no) costs, because they sometimes deliver prompt results (including significant economic savings), because they maintain freedom, and because they can be highly effective.”

Choosing how much meat to eat is a highly personal decision, so the proposed project’s campaign approach will focus on the idea of nudging as opposed to nannying in order to improve the reception of the campaign messages. By nudging people to make more responsible, informed decisions about what they eat, campaign messaging will feel more like an open and transparent dialogue rather than a one-way discussion. By focusing on education and providing transparency in the way those messages are communicated, the campaign is expecting that by providing people with a better understanding of the reasons to change their eating habits, they will do so voluntarily.

One additional point worth mentioning about the KLM Fly Responsibly campaign is its international scope. For the purposes of this thesis discussion, the research focused on the animal agriculture industry in the United States. However, KLM’s campaign serves as a reminder that issues of sustainability and environmental responsibility are global, not national, and while it makes sense to pilot this type of campaign in a specific location, the implications can be relevant on a broader scale. The anticipation for this project is that any conclusions drawn about the effectiveness of communication design principles on changing attitudes and behaviors can serve as a basis for further research, both in the U.S. and internationally.

## *Measuring Campaign Effectiveness*

Based on the preliminary research into these issues, analysis of existing campaigns, and the proposed target audience, this thesis project proposes an awareness campaign designed to educate consumers about the unsustainable meat-eating ecosystem in America using facts and statistics about the meat production industry as an effective solution. However, in order to measure the campaign's effectiveness, and determine what if any larger conclusions can be drawn about the efficiency of education-based awareness campaigns to change attitudes and behaviors, it is necessary to objectively evaluate the successes and failures of campaign ideas. To do this, a survey was conducted asking participants specific questions related to their existing knowledge of the issues, and how being further educated about these issues might affect their decision to eat or not eat meat in the future.

### *Survey Questions*

The survey was conducted through the Texas State University Qualtrics professional survey tool, and was designed to determine how much existing knowledge people had of the issues, and how much of an effect being exposed to new eye-opening information would have on their attitudes and behaviors towards meat-eating. After acknowledging the intent of the survey and giving their consent to participate, participants were presented with the following list of questions:

1. What are your eating habits?
2. If you don't eat meat, why?
3. Prior to this survey, were you aware of any of the following facts about animal agriculture's environmental effects? Up to 51 percent of

worldwide greenhouse gas emissions can be attributed to livestock and their byproducts (Goodland and Anhang, 2009). Approximately 45 percent of earth's global surface area is dedicated to livestock systems (Thornton, 2011). Animal agriculture is responsible for up to 1/3 of all fresh-water consumption in the world today (Gerbens-Leenes et al. 2013). 2,500 gallons of water are needed to produce 1 pound of beef. (Robbins, 2000)

4. Prior to this survey, were you aware of any of the following health related facts? 80% of antibiotic sold in the US are for livestock (Loglisci, 2010) Communities surrounding factory farm operations suffer from more severe pollution and an increased susceptibility to disease. (Sayre and Laura 2009) Factory farm conditions create a pressure cooker environment for antibiotic-resistant bacteria like Bird Flu, which infect more than 2.8 million Americans each year, killing more than 35,000 (CDC, 2019).
5. Prior to this survey, were you aware of any of the following facts about animal welfare? 70 billion+ animals are killed for food worldwide every year, including 6 million every hour. That number is expected to double by 2050 (Compassion in world farming, 2017) Chickens bred for meat are forced to grow 65 times faster than their bodies normally would, and the industry continually seeks to increase their growth rate (Horton, 2006) Dairy cows typically live to their third lactation before being culled. Naturally, a cow can live for 20 years (Lymbery, 2012) More than 99% of

all farmed animals endure the most intensive farming methods (Sentience Institute, 2019)

6. How do the facts listed above affect your attitudes toward eating meat?
7. In your opinion, would an awareness campaign shedding light on the hard truths about meat production in the U.S. be an effective deterrent from eating meat?
8. If there was a satisfactory alternative to traditionally raised meat (i.e. plant-based proteins, lab grown meat, etc.), would you be open to switching?

### *Survey Results*

Out of 31 people surveyed, 17 were full meat-eaters (54.84%), 3 ate white meat only (9.68%), 2 were pescatarian (a person who does not eat meat but does eat fish) (6.45%), 5 were vegetarian (16.13%), and 4 were vegan (12.90%). Of the non-meat-eaters, 16.67% did so for health reasons, 16.67% did so for environmental reasons, 25% did so for animal welfare concerns, and 41.67% chose the other option, and specified “all of the above.” Survey question 4 presented them with several facts related to animal agriculture’s environmental effects. 15 participants (48.39%) answered that they were not aware of the facts prior to the survey, whereas 13 participants (41.94%) said they were aware of some of the facts, and 3 participants (9.68%) were aware of all the facts prior to the survey. Question 5 similarly presented participants with facts related to animal agriculture’s health effects. To this question, 10 participants (36.33%) responded “no to all,” indicating they were not aware of any of the facts prior to the survey. 10 participants (33.33%) indicated they were aware of some of the facts prior to the survey, and 1

participant (3.33%) was aware of them all. Question 6 presented facts related to animal welfare and produced similar results. 23 participants (76.67%) were not aware of any of the facts prior to the survey, 7 (23.33%) were aware of some, and 0 participants were aware of all the facts presented.

When asked Question 7, “How do the facts listed above affect your attitudes toward eating meat, 6 participants (19.35%) indicated that it would affect their attitudes “a great deal,” 8 participants (25.81%) selected “A lot,” 8 participants (25.81%) selected “a moderate amount,” 7 (22.58%) selected “a little,” and 2 (6.45%) selected “none at all.” As a follow up to question 7, question 8 asked participants to predict the effectiveness of a campaign focusing on the type of facts presented to them previously in the survey. To this question, 3 participants (9.68%) answered “definitely yes,” 17 (54.84%) answered “probably yes,” 6 (19.35%) answered “might or might not,” 5 (16.13%) answered “probably not,” and 0 answered “definitely not.” Finally, in response to Question 9, “If there was a satisfactory alternative to traditionally raised meat (i.e. plant-based proteins, lab grown meat, etc.), would you be open to switching, 7 people (22.58%) answered “Extremely likely,” 6 (19.35%) answered “moderately likely,” 5 (16.13%) answered “slightly likely,” 3 (9.68%) answered “neither likely or unlikely,” 2 (6.45%) answered “slightly unlikely,” 3 (9.68%) answered “moderately unlikely,” and 5 (16.13%) answered “extremely unlikely.” See Appendix for complete survey results.

### *Survey Takeaways*

The purpose of the survey was to provide an objective evaluation of the campaign’s fact-based approach, and to gain an understanding of how effective this educational approach can be at affecting attitudinal and behavioral change. While it is not



feasible to determine what percentage of people would actually alter their actions as a result of this campaign, by measuring respondents' level of awareness before and after being exposed to campaign facts, as well as how much of an effect participant's thought that this new information would impact their attitudes toward eating meat, it is possible to draw meaningful conclusions about the campaign's effectiveness. If the educational strategy behind the campaign is sound, and the messages are communicated in a way that is quickly comprehensible and easily retained, then the campaign has succeeded in its goal of raising awareness about the issue.

Based on the results of the survey, measurable increases were found in awareness of the information presented, and significant impacts were made on the attitudes and thought processes of participants. Less than 10% of participants indicated they were aware of all the facts presented prior to the survey, whereas 48% or higher indicated they were not aware of any of the facts prior to the survey. This indicates a considerable increase in awareness for the majority of participants. Furthermore, over 60% answered probably yes or definitely yes to the question of whether or not a campaign shedding light on these types of facts would be an effective deterrent to eating meat. This indicates a high level of information retention, increasing the potential for attitudinal and behavioral change. While it must be recognized that the survey's sample size is limited, these results indicate a good chance campaign success based on the criteria initially laid out, and point to a high chance of campaign success using the communication strategies laid out for the Meat = Misery campaign.

### III. METHODS

Based on knowledge gained from the case studies and the audience survey in the preliminary research phase, this section addresses the conception, execution, and final design outcomes of an awareness campaign aimed at educating the public about the problems with traditional meat production in the U.S., and the unsustainability of the current meat-eating ecosystem. This will include final executions of several principal elements of the campaign, ideas for additional campaign support, as well as initial ideation for a follow up campaign designed to educate and improve general perceptions of cultured meat products. However, before initiating concepts for the campaign's design, it is first important to establish exactly what the campaigns are trying to accomplish, what their target audiences are, and what messages are trying to be conveyed. Once these things are clearly defined, it is necessary to clarify the intended applications of each campaign, why these are the most impactful applications for the success of the campaign, and how they will be executed to maximize their effectiveness. Following these steps and incorporating building off some of the approaches observed in the case studies will help ensure that the campaign's ideas sound and supported by accepted research.

#### *The Purpose of the Campaign*

The purpose of the initial campaign will be to educate consumers about the myriad of issues associated with meat production in the United States, with the ultimate goal of convincing consumers to re-think their meat-eating habits. By offering straightforward yet eye-opening facts about the current state of meat production in the U.S. the goal is to motivate the audience to voluntarily decrease their meat intake and encourage an overall shifting of attitudes regarding the role of meat in a healthy balanced diet, from

a primary role to a secondary/complimentary one. While it is certainly important to educate people about the many negative impacts of meat-eating ecosystem, it is equally important to be positive and solutions oriented, and not to focus solely on the problems at hand, but also offer useful tips and recommend actions that can be taken that will have a positive impact, and which if enacted by enough people, will help address the issue as a whole. The hypothesis is based on the idea that by communicating meaningful information in an effectual way and in the appropriate places, the campaign can increase general awareness of the issues, heighten the sense of urgency, and encourage more people to make responsible decisions when buying and eating meat.

### *Target Audience*

Similar to how the *IWantToBeRecycled* campaign cast a wide net in terms of its target audience, the target audience for this project's awareness campaign includes anyone who eats meat as a part of their diet, or all non-vegetarians making over \$45,000 per year in annual income. The income threshold will exclude families and individuals living near or below the 2021 poverty line (2021 Poverty Guidelines), ensuring that the people surveyed are food secure and could voluntarily change their eating habits without affecting their livelihoods. By casting a large net in terms of target audience, the campaign can maximize its impact and focus on communicating facts and figures and that will impact the greatest number of people and help illuminate the entire picture rather than only a part of it. It may not be enough for some to only know the environmental issues, or only the healthy issues, but by providing people with the larger context of all the ways in which the current meat production system is harming the human experience,

the hope is to inspire as many people as possible to act, and to provide them with the tools they need to do so.

### *Messaging Strategy*

There were several challenges to navigate when developing the messaging for this campaign. The first is the very personal nature of the behavior the campaign is trying to encourage people to change voluntarily. At a very primal level, what and how a person eats is tied to their base survival instinct, and any perceived threat to that can elicit a fearful response, particularly for those with a history of food insecurity. Another reason people are very guarded about their eating habits is because eating is a mechanism for regulating their health, weight, and overall sense of well-being not only physically, but emotionally as well. According to the Porges Polyvagal Theory, a behavioral hypothesis proposed by Dr. Stephen Porges of the Kinsey Institute of Indiana University, relationships and social engagement with others is the primary way that mammals have developed to calm themselves, and since eating is often central to human gatherings and social interactions, it often serves a similar function (Porges 2011). This goes to show the deeply rooted an individual's eating decisions are, and how difficult it can be to influence those habits. From a messaging perspective, it means focusing on educating people to the realities of the meat-eating ecosystem in the U.S., thereby increasing their awareness and allowing any behavioral changes to be fostered intrinsically, for the physical and emotional well-being.

This leads to the second challenge needing to be overcome when developing the messaging for this campaign. Since the primary focus of the campaign is educating people using credible and easily understandable facts, and knowing from preliminary

research that those facts were primarily related to three subjects (the environment, health and safety, and animal welfare), a primary message needed to be developed that could not only encompass all three of these ideas, but be powerful, impactful, and memorable at the same time. The proposed campaign slogan is “Meat = Misery.” “Meat = Misery” is short and simple, uses alliteration which is proven to increase memory retention (Brooke 2008), is easily abbreviated as M=M for use in short-format applications like social media, and is broad enough to encompass all three subjects in a way that makes sense. Misery is a term that can be applied to meat-productions effect on the environment, mass-produced meat’s effect on human health and safety, as well as the meat-production complex’s impact on animal welfare.

### *Call to Action*

While developing well-crafted and impactful messaging is an important first step in developing an awareness campaign, it’s equally important to include a strong call-to-action so people have something constructive to do with the information they’ve received. In the case of this campaign, the call-to-action is very simple “Don’t Eat Meat.” For this reason, the phrase “Don’t Eat Meat” will be used as a tagline to be paired with the campaign logo, will be emphasized throughout the campaign messaging, and will be encouraged using implied social contracts, such as the *Don’t Eat Meat Pledge*, an additional call-to-action on the campaign website and social media platforms asking people to publicly sign a petition stating their agreement to stop eating meat. This technique of asking for a small verbal commitment which can in-turn lead to a larger one, has been shown to be effective in promoting sustainable behavior (McKenzie-Mohr 2011). This is one of several strategies that have been combined to create the unique

communication strategy designed to maximize the effectiveness of the proposed project's campaign.

### *Applications*

Another strategy used to maximize the reach and reiterate important campaign messages, as seen in the Truth Campaign case study, is the use of a mix of media types to disseminate campaign messages. According to a study on the ingredients of a successful behavioral change campaign, the evaluation of two Scottish campaigns aimed at changing “binge-drinking” culture found that TV adverts of the campaign were recalled by younger audience whilst radio was more effective for older generations, and combining communications approaches appeared to facilitate behavioral change (Davies 2012). Thus, by making it part of the campaigns communication strategy to utilize a variety of channels, including print, web, and social channels, the message will reach more people and will have a higher likelihood of being seen by the target audience on their medium of choice.

### *Print Applications*

The first application type for the Meat = Misery campaign is print, mostly in the form of posters, billboards, fliers, and stickers that are designed to be placed and viewed in public spaces. These are designed to be attention-grabbing without resorting to the shock value of gruesome imagery of animal suffering. Instead, the focus of the larger scale print applications (posters, billboards) will be on presenting eye-opening facts at high traffic areas such as bus stations and subway stops, with the goal of getting passers-by to stop and think for a moment, or ask the person next to them, “did you know that?” As demonstrated in the Truth Initiative case study, maximizing the impact of a campaign

means always considering the context that a design will be viewed in. Since these types of posters and billboards will be viewed in short, passing moments by large numbers of people, it's important to ensure the messaging is both easily digestible while still remaining impactful when viewed in this context. The smaller print applications, such as fliers and stickers, are limited to branding applications such as the logos and taglines, and are simply designed to make people aware of the existence of the "Don't Eat Meat" campaign and drive traffic to the campaign website.

### *Web Applications*

The primary online application of the "Meat = Misery" campaign is in the form of the campaign website, which is the main hub for all campaign information, resources, documentation, and involvement apparatuses. Most if not all visual applications of the campaign will include the website URL, *meatequalsmisery.com*, as it's the place people can go to get all the campaign information and messages in one place, fact-check campaign information, access additional resources, and get further involved with the cause. It is where all campaign applications (print, web, and social media) will drive traffic to, where the campaign and its significance can be explained, it's the mechanism for micro-initiatives such as the Don't Eat Meat Pledge, and is where people can find ways to volunteer, connect, and organize locally to make a difference in their communities. Similar to the strategy employed by the *IWantToBeRecycled* campaign, the website is the quintessential element that ties the other elements of the campaign together, and as such needs to be robust enough to support the needs of the campaign and legitimize its message.

### *Social Media Applications*

The campaign's social media handles would be *@meatequalsmisery*, in order to be consistent with the web URL, and the content posted would mirror that of the on the print and web applications, with formatting optimized for each platform. In addition to the tagline call-to-action of "Don't Eat Meat," the secondary call-to-action would be in the form of a URL link back to the website where they can learn more about the campaign, research on their own, pledge, or get involved. The social media channels would also kickstart different initiatives within the campaign, such as challenging people to take and spread the *Don't Eat Meat Pledge* and encouraging them to share their stories by posting under the *#MeatEqualsMisery* hashtag. Social media also allows more accurate targeting of specific demographic groups, which would be utilized to tailor social media messaging to groups with which it would resonate the most. Together, the combination of print, web, and social media applications should provide adequate saturation of the right messages in the right places to effectively raise public awareness.



#### IV. OUTCOMES

With the messaging, calls-to-action, and applications determined, the next step was to use established creative methodologies to produce the creative applications that would encompass the strategies dictated by the preliminary research and create a campaign that is informative, memorable, and that can be effectively measured.

##### *Campaign Logos*

Marc Gobé, in his book *Emotional Branding: the new paradigm for connecting brands to people*, states that “powerful logo identities make advertising and public relations programs more effective by becoming visual shorthand for the meanings attached to them and thereby influencing consumers to be receptive to a company’s message” (Gobé, 2010). The logo for Meat = Misery is designed with this idea in mind. It is designed to be flexible, with multiple iterations and compositions; it is designed to be memorable, with colors, typography, and graphic elements that make a long-lasting impression; and its designed to be short-format friendly, with mark that is easily abbreviated for social media and other short-format applications with no loss of brand recognition.

## Primary Logo

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**Figure 8.** Meat = Misery Campaign Logo. The primary logo for the Meat = Misery campaign aimed at raising awareness of unsustainable meat production practices in the U.S.

## Alternate Logo Versions

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### SECONDARY LOGO



### LOGO ALTERNATES



Primary logo w/ tag



Secondary logo w/ tag



icon

**Figure 9.** Meat = Misery Campaign alternate logos and icon. The extended suite of logo applications for the Meat = Misery campaign.

The primary concept behind the *Meat = Misery* campaign identity is the idea of bringing to light clandestine information. By placing the red highlight on the word misery, it not only heightens the impact of the most important word in the logo, but it also conveys the idea that the misery that is associated with meat production is information that had been redacted or covered-up, and is now being exposed to public light. This not only helps visually to highlight a key part of the identity, but also makes it seem as if the

information is scarce and difficult to obtain, and therefore carries more weight. In addition to the primary horizontal composition, there are also secondary compositions that include a stacked arrangement, versions with and without the call-to-action text, as well an icon that can be used for a hashtag or other shorthand applications, increasing brand recognition.

### *Campaign Typography*

The two typefaces chosen for the Meat = Misery campaign are Cheddar Gothic Rough Regular, and Austral Sans Regular. Cheddar Gothic Rough Regular is used for headlines and display treatments, whereas Austral Sans Regular is used for body copy.

Fonts used in campaign

CHEDDAR GOTHIC ROUGH REGULAR

1234567890!@#\$\$%^&\*()-=+  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ

AUSTRAL SANS REGULAR

1234567890!@#\$\$%^&\*()-=+  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

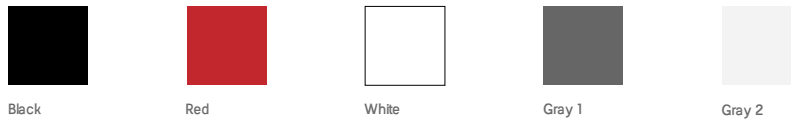
**Figure 10.** *Meat = Misery Campaign* fonts. The typography palette used in the *Meat = Misery campaign*.

When selecting the typefaces for the campaign, it was important that the typefaces used would reinforce the overall design concept of revealing information that the powers that be would like to conceal. To this end, the primary typefaces selected for the campaign are Cheddar Gothic Rough Regular and Austral Sans Regular. Both have a rough and “distressed” look and feel, meaning they include graphic elements meant to exhibit the wear-and-tear of age. This distressed aesthetic is intentionally selected to reinforce the unattractiveness and indelicacy of the subject matter every time a person reads something campaign related.

### *Campaign Color Palette*

The color palette for the campaign is very simple and consists of the black and red of the logo, combined with 2 neutral grays and white.

Color Palette



**Figure 11.** *Meat = Misery Campaign* color palette. The color palette used in the *Meat = Misery* campaign.

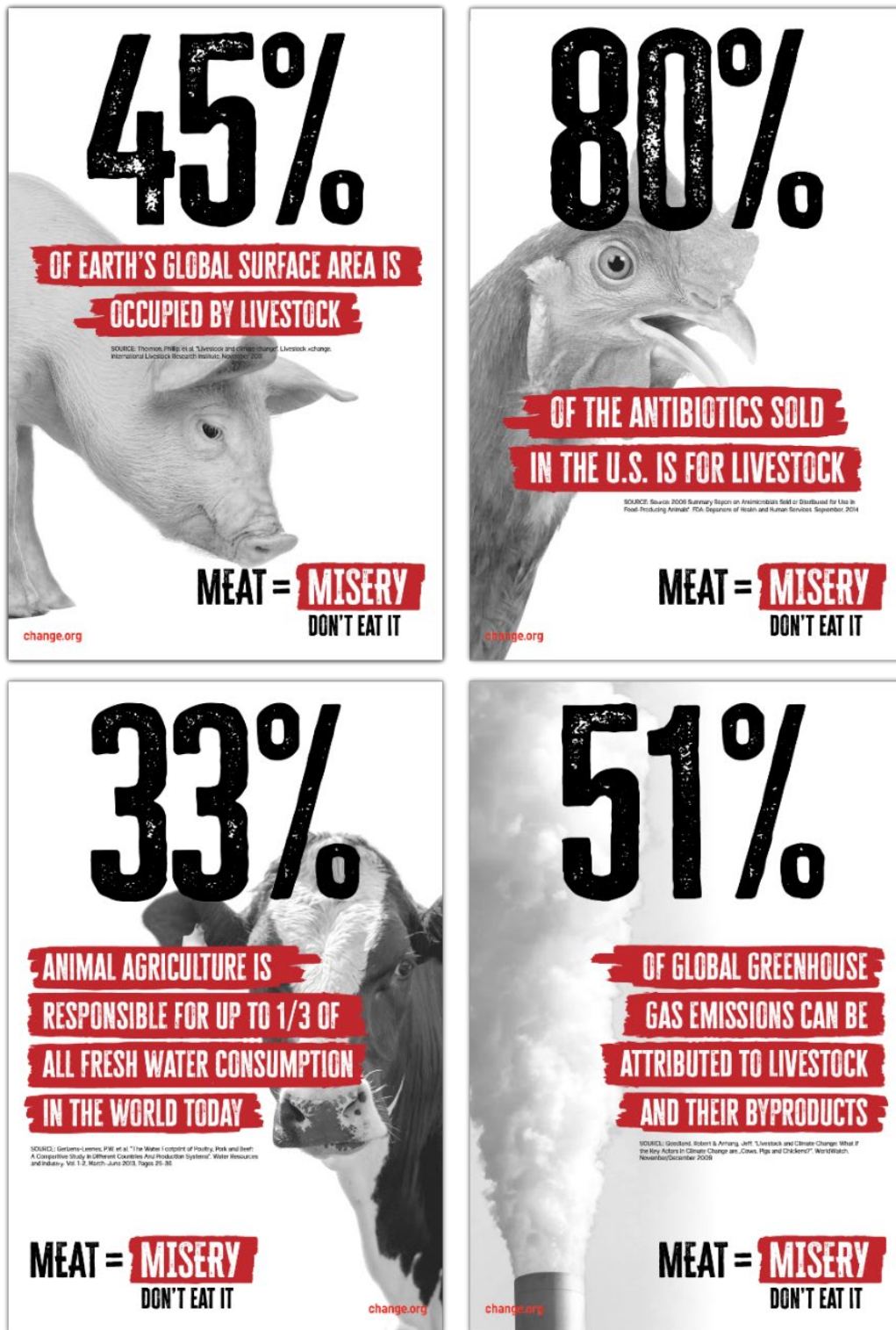
The simplicity of the color palette is by design and was chosen for two reasons. First, by composing most of the palette of neutral colors, it allows the highlight red color to stand out that much more from the others, increasing the emphasis on the *Misery* part of *Meat = Misery*. Second, it synergized well with another element of the campaign, the photography style, which utilizes primarily black and white photography. The combination of the stark black and white photography style with the redacted red highlight style for headline text created an eye-catching visual style and increased visual impact for the hard-hitting educational factoids that the campaign is based around.



**Figure 12.** *Meat = Misery Campaign* hero image. An example of the headline style from a hero image on the *Meat = Misery* campaign website.

### *Campaign Posters & Billboards*

Due to the public nature of the campaign, one of the primary touchpoints come in the form of large format posters or billboards, which would be strategically placed in heavily trafficked areas like shopping centers, busy street corners, and transportation stations for maximum visibility and impact.



**Figure 13.** *Meat = Misery Campaign* poster series. Poster series designed to grab people's attention with shocking facts about the meat industry's effect on the environment, human health, and animal welfare.





**Figure 14.** *Meat = Misery Campaign* poster mockup. Mockup of *Meat = Misery* public space poster application placed in heavily trafficked area.



**Figure 15.** *Meat = Misery Campaign* posters mockup. Mockup of *Meat = Misery* public space poster applications placed in heavily trafficked area.



**Figure 16.** *Meat = Misery Campaign* billboard mockup. Mockup of *Meat = Misery* public space billboard applications placed in heavily trafficked area.



**Figure 17.** *Meat = Misery Campaign* billboard mockup. Mockup of *Meat = Misery* public space billboard applications placed in heavily trafficked area.

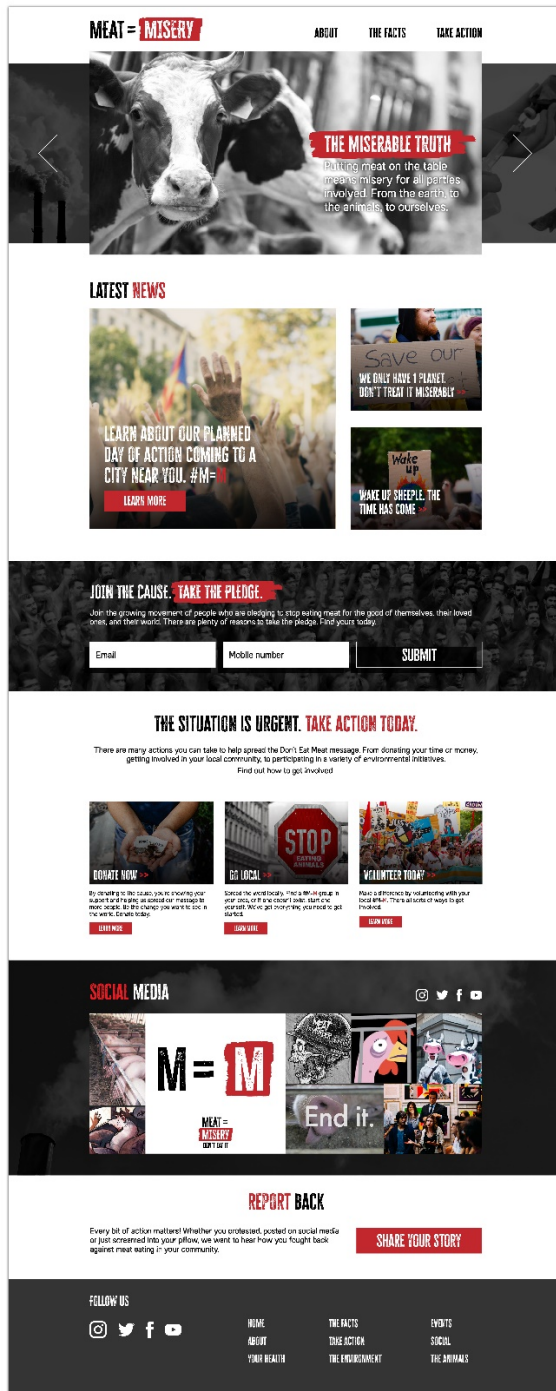
Each poster design centers around presenting one key fact, chosen because it is likely both unknown to the viewer and because it possesses enough shock-value to potentially give them a moment of pause. This moment of consideration is one of the key



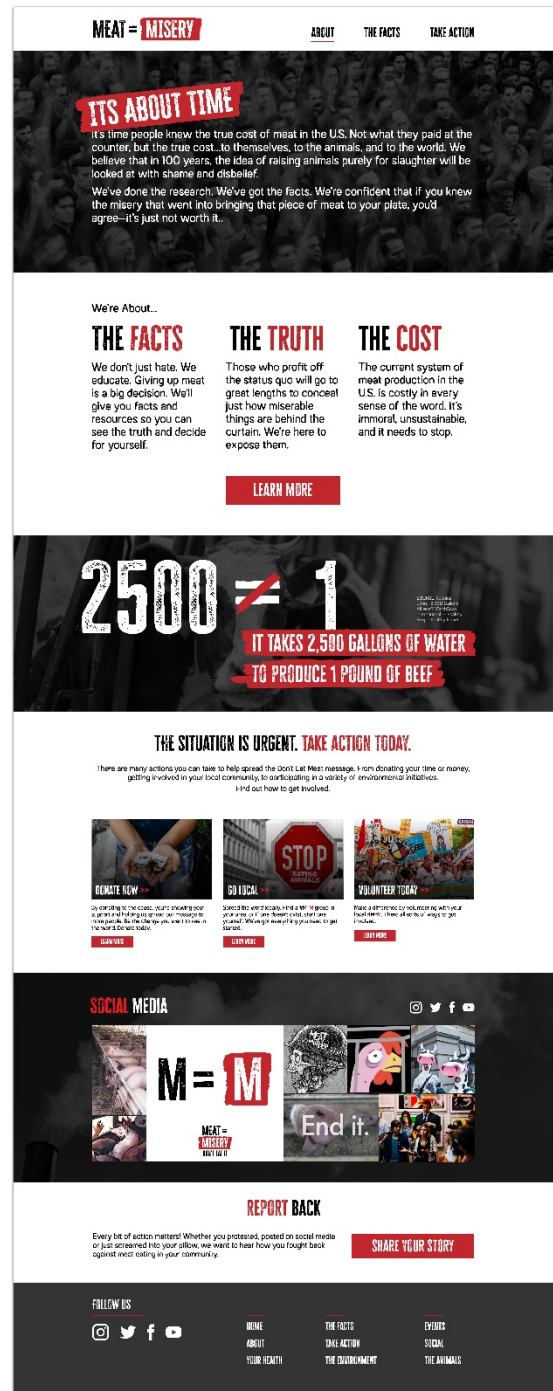
goals this campaign is hoping to achieve. If the message can capture the attention of the viewer, if only for a moment, then the campaign has overcome its first major hurdle, and has successfully stimulated the curiosity of the viewer. This moment of curiosity is key, because the goal of this campaign is to motivate people to change their eating habits on their own, and research has shown that curiosity an important driving force in one's sense of self-efficacy (Li, Huo, Zhuang, & Song, 2019). Once a viewer's attention is gained, it is then funneled toward a primary information source, in this case the campaign website. As we noted in the *IWantToBeRecycled* case study, they website is the key hub for people to satisfy their curiosity, gather more information, delve deeper into the research, and find the tools they need to take action on their own, whether that is to change their personal behavior, or to get involved with promoting the cause.

### *Campaign Website*

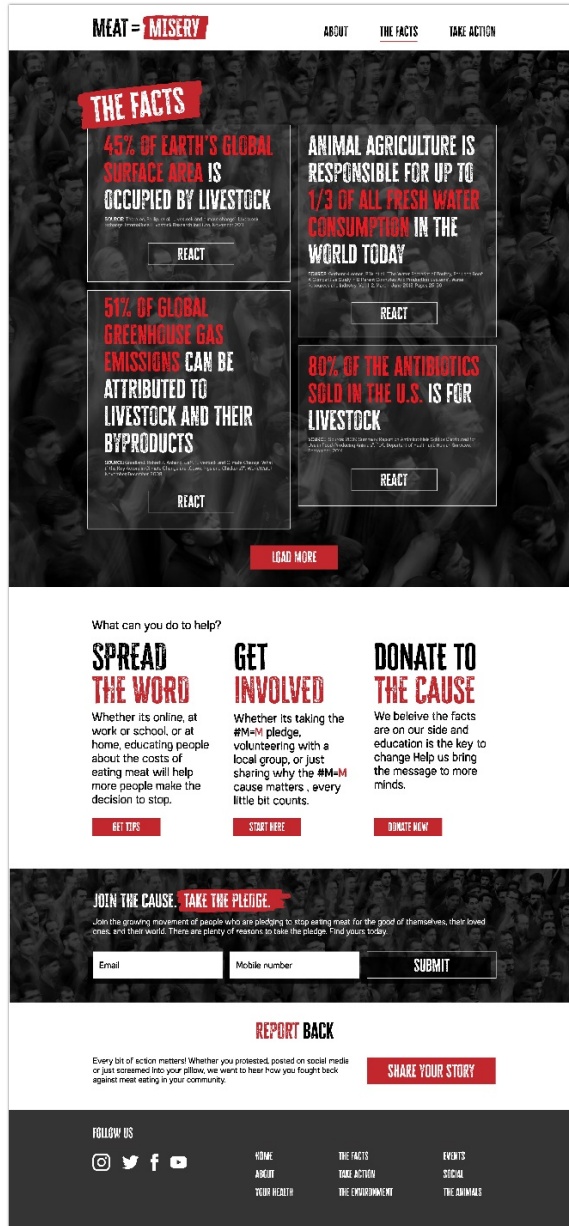
While this type of curiosity inducing moment is certainly key to getting a viewer's attention, on its own it does not possess the depth of information needed to be a legitimate educational resource. That is where the supplemental touchpoints like the website and social media channels come in. The hope is that the attention garnered through the poster and billboard designs can be parlayed into further engagement on the campaign website or social media channels. There they will find additional information that is designed to provide the audience with all the resources needed to make educated choices, to keep the engagement constant with tips, tricks, articles, and campaign news, as well as offer opportunities to get involved with the campaign through volunteering and creating campaign ambassadors that will help expand and carry the movement forward organically.



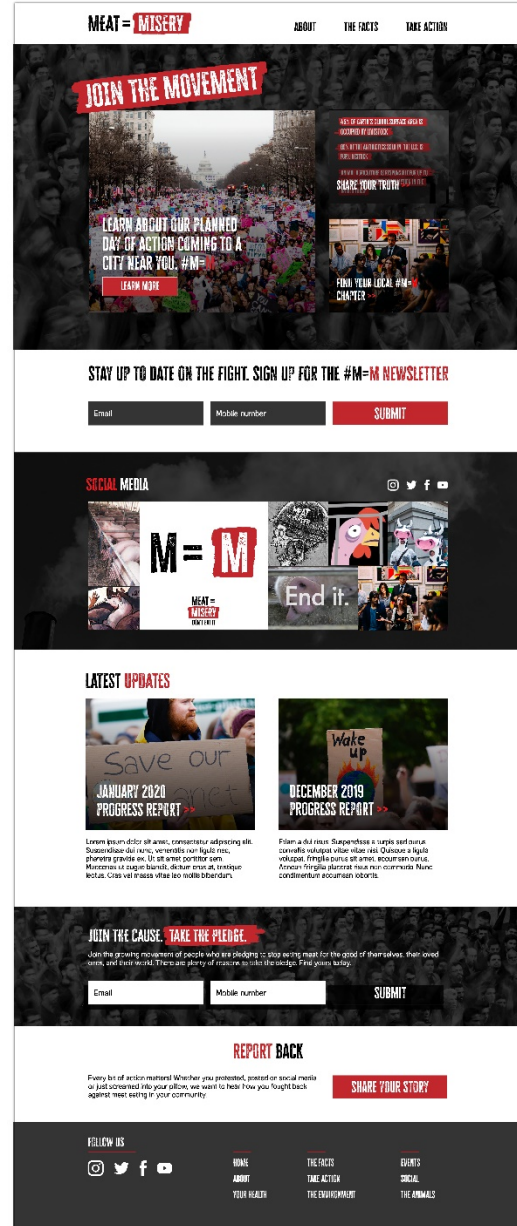
**Figure 18.** Meat = Misery Campaign homepage. The Meat = Misery Campaign homepage is the primary destination for campaign news, links, and social media content.



**Figure 19.** Meat = Misery Campaign About page. The Meat = Misery Campaign about page states the campaign mission and other general information.



**Figure 20.** *Meat = Misery Campaign Facts page.* The *Meat = Misery Campaign* Facts page contains additional eye-opening facts about the meat industry, including references to support them.



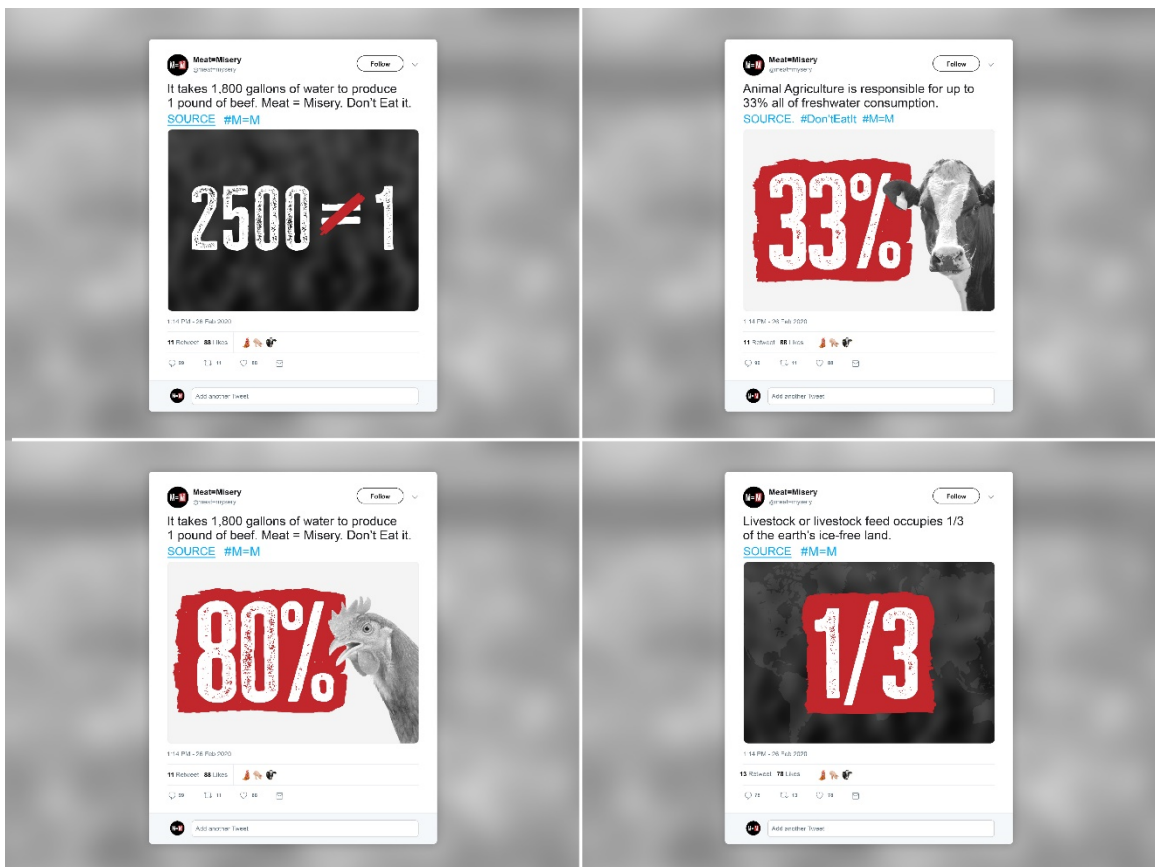
**Figure 21.** *Meat = Misery Campaign Take-Action page.* The *Meat = Misery Campaign* take-action page offers volunteer and other involvement opportunities associated with the campaign.

The website is the primary information and resource hub for the campaign, and as such is where the other touchpoints are all attempting to drive people. Most publicly displayed materials would include the website URL, all social media posts would link back to the website, and website metrics would be a key metric in evaluating campaign success. Having a robust amount of information and presenting it in a way that is transparent and well documented is key to the success of the campaign, because it allows people to satisfy their curiosity of their own agency. By giving people the opportunity and resources to take control over their education about the sustainability of eating meat, the goal is that they will then, in-turn, be more likely exercise that control and decide to act on what they've learned, altering their eating habits to eat less meat.

### *Campaign Social Media Content*

The primary social media platform utilized for the campaign is Twitter, as the shortened format lends itself well to the type of factoid content that the campaign is focused on. Twitter also makes sense as the primary platform because it has the reach necessary to reach the most people in the least amount of time. As Marc Gobé puts it, "Twitter resonates with the new generations because it is about doing more with less, more often. It edits and simplifies connections at a time when the availability of information is out of control. Think about it: Twitter forces you to edit complex thoughts and ideas into their most succinct expression" (Gobé, 2010). The overall social media strategy for the campaign is to use it reinforce campaign messages, increase their reach, and to target specific demographics that are most receptive to these ideas, based on market research. This strategy is designed to achieve several campaign goals, including increasing overall campaign brand awareness, driving traffic to the website, and perhaps

most importantly creating advocacy among consumers who support the message, who will then share with their networks, spreading campaign ideas organically and increasing community engagement. This voluntary community advocacy is the ultimate goal for the social media platforms, as it is the type of free word-of-mouth marketing that money simply can't buy. People sharing or mentioning the campaign on social media would be encouraged to utilize the hashtag *#MeatEqualsMisery*, which over time will become shorthand for the campaign, solidifying the brand and increasing the ubiquity of the message in the psyche of the American public.



**Figure 22.** *Meat = Misery Campaign* social media content examples. Examples of social media content that would be posted to the *Meat = Misery* Twitter channel.



### *Additional Campaign Touchpoints*

Additional touchpoints for the campaign include a variety of apparel and promotional items that can be worn or distributed by campaign ambassadors. These include t-shirts, hats, stickers, flyers, web ads, etc., and would serve a different purpose than the primary campaign touchpoints. These extension items do not include the sort of data and facts that the primary educational materials do, as their objective is simply to spread campaign awareness, build brand recognition, and help further disseminate and establish the brand elements as instantly recognizable visual shorthand for the campaign. Furthermore, it gives supporters an easy way to further the cause, provides free exposure and marketing for the brand, and is an opportunity to raise money to continue the campaign into the future.



**Figure 23.** *Meat = Misery Campaign* additional touchpoint examples. Examples of *Meat = Misery* apparel and stickers designed to be easily accessible and spread campaign awareness.

## V. CONCLUSIONS

As previously discussed, there are several avenues to explore that have the potential to affect change with this issue. The first and most obvious being a large-scale shift in dietary habits towards a more plant-based diet. While this may be the ideal solution, due to the personal nature of eating habits and the gradual nature of large-scale shifts in culture, it is also probably the most distant. The second was the idea of bringing about policy change, but given the typically sluggish pace of governmental action, relying on this is not an efficient approach. The last solution discussed, addressing the issue through technological innovation, has the potential for lasting and impactful change and is the focus of a potential expansion to the Meat = Misery campaign.

As the issues surrounding industrial meat production become more and more mainstream, meat companies are under pressure from consumers to reduce their reliance on animal drugs and to treat livestock more humanely. Some have invested in plant-based products, hoping to win business from both vegetarians and carnivores concerned about the meat industry's heavy use of crops and water. Another technology, however, is allowing scientists to produce real meat from animal cells, without the need to feed, breed, or slaughter actual animals. Cultured meat, while still in its infancy in terms of mass production, has the potential to revolutionize the meat production system by addressing the three major issues with conventional meat production: human health, the environment, and animal welfare. Because cultured meat is produced in a lab, the unsanitary factory farm conditions that necessitate antibiotic supplements is removed, and exactly what goes into the meat can be controlled to a much greater degree, resulting in a more hygienic product. Cultured meat would also eliminate the need to raise, feed, and slaughter animals, freeing up much of the world's crop and farmland being used to

feed and house billions of cattle, hogs, and chickens, as well as eliminating all animal welfare issues associated with these practices.

In 2016, the founder of Memphis Meats (a company at the forefront of cultured meat research and development) stated on podcast with NPR's Sam Harris, that perception was one of the three biggest hurdles to bringing cultured meat to market (Sam Harris 2016). The perception being that cultured meat is unnatural, or at least less natural than traditionally raised meat. Tackling this problem of perception regarding cultured meat will be the second phase of the Meat = Misery campaign. Where the first phase was about raising awareness of the problems, the second would be about maintaining the educational approach, but with more focus on cultured meat as the potential solution.

For the purposes of branding and message recall, phase two of the campaign should utilize a similar communication strategy of bold, eye-opening facts, and maintain some level of design consistency, so it would be easy for viewers to connect the two phases together. Updated designs would be created for large scale print pieces, using facts aimed at making people aware that factory farming practices are actually more “unnatural” than those involved in the production of cultured meat. The website would be updated with a new *Alternatives* tab, where people could find more information, links, and resources to learn about cultured meat as well as other legitimate alternatives to eating traditionally raised meat. Social media would again be used to reach particular demographics, but phase two would include more of a focus on presenting positive imagery on twitter and Instagram in addition to the educational messaging. Showing cultured meat included in beautiful, composed, share-worthy plates should go a long way towards normalizing it peoples' minds and fighting the stigma associated with it.



While it is not part of this thesis project directly in its first phase to test the degree to which the second phase campaign affected its audiences attitudes toward eating meat, an evaluation of the campaign strategies was done in the form of a Thesis exhibit presentation, in which an audience was presented with meat producing factoids and asked to answer a series of questions about their existing attitudes toward meat eating, what factors affect those attitudes, and how open they would be to switching to an alternative such as cultured meat. Of 25 survey respondents, 74% were meat eating, 8% white meat only, 8% vegetarian, 5% vegan, and 4% were pescatarian. When asked how much personal health and wellness impacts their eating habits, 74% answered “large impact,” 20% “medium impact,” and 4% “small impact.” When asked how much sustainability and environmental impact effects their eating habits, 58% said it has a “large impact,” 37% “medium impact,” and 4% “small impact.” Finally, when asked how much impact animal welfare issues have on their meat-eating habits, 58% said it would have a “large impact,” 47% “medium impact,” and 8% “small impact.” Respondents were also asked about their knowledge and attitudes toward cultured meat. Of those surveyed, 38% were aware of cultured meat, 42% did not, and 20% were unsure. 60% thought cultured meat to be a healthier alternative to traditionally raised meat, 30% saw no discernable difference, and 8% thought cultured meat was less healthy. In regards to environmental effects, 80% agreed that cultured meat is more friendly to the environment, 12% saw no ethical benefits, and 4% less environmentally friendly. 90% of respondents considered cultured meat to be more ethical than traditionally raised meat, with 4% seeing no discernable difference and 4% thinking it is less ethical. Finally, survey takers were asked if they would be willing to try cultured meat, and if not, what would prevent them from

doing so. Of those who said they would not try it, 80% said it was due to taste/appeal, with only 15% mentioning other concerns.

These responses indicate several things that are relevant to this project's campaign strategy and implementation plan. One is that all three major categories, concerns about personal health, sustainability issues, and animal welfare concerns all have significant impact on people's meat-eating habits. Another is that while it appears people generally accept that cultured meat is a healthier, more ethical, and more sustainable than traditionally raised meat, questions about taste and overall product appeal are the biggest factors that would prevent them from trying it. These results indicate that people want to eat things that are healthier and better for the world and its environment, but it's important that they trust the source and feel comfortable with any new products. The knowledge gained from this thesis exhibit informed the development of the strategies used in the initial campaign and its impact on the eating habits of those who are exposed to it. Furthermore, it directs phase two of the campaign to focus on both: building public knowledge of cultured meat as a safe and trusted alternative to traditionally raised meat and also dispel the stigma that it is less tasty or appealing than what they're used to eating.

While raising awareness about the issue is an important first step, by implementing this second phase, the campaign is able to further effect change on the issue by offering additional steps people can take to become part of the solution. Inspiring this type of voluntary action is never an easy task when talking about these critical issues. However, before people can be inspired, first they must be informed. It has been the intention of this thesis project, in addition to drawing attention to the issues

associated with animal agriculture in America, to demonstrate that with concise communication and impactful design, campaign messages can both inform *and* inspire, becoming an effective instrument for galvanizing social change.

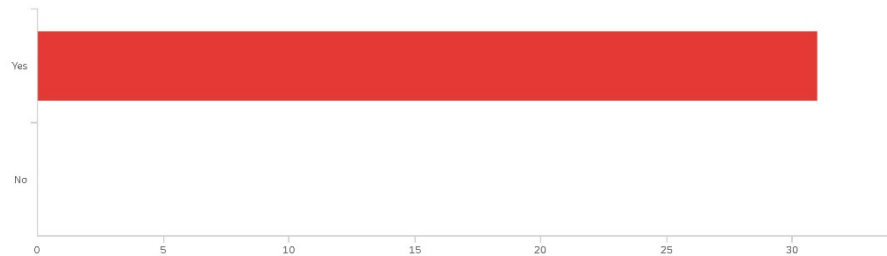
### *Future Research and Expansion*

- A multi-tiered campaign roll-out, with various stages and tailored strategies for local, national, and international distribution.
  - Messages aimed at targeted local populations to focus more on encouraging responsible personal choices and the interpersonal sharing of good practices.
  - Messages aimed at national and international audiences focus on the broader health, environmental, and animal welfare concerns that affect all citizens and the planet.
  - Micro campaigns focusing on linking both the short-term and long-term benefits of more responsible meat-eating habits to health of people as well as the planet.
- Messages designed to build off the first campaign phase, and distributed via a mix of communication channels to maximize dissemination, including but not limited to:
  - Large and small format print applications
  - Web content in the form of web ads, video production, and an additional section on *meatequalsmisery.com* dedicated to cultured meat as a viable alternative and resourced where people can continue to research on their own.

- Social media campaigns with messages targeted at specific demographics, informed by the data collected in the thesis exhibit survey.
- Social media marketing strategies that incorporate psychology, sociology, and anthropology to better understand people's attitudes and motivations.
- Utilizing trusted and recognized voices as campaign ambassadors.
- Paid television advertising as well as curated online video content.
- Cultivating peer-to-peer communication via social media content and local in-person gatherings.
- Funneling everything toward an information hub ([meatequalsmisery.com](http://meatequalsmisery.com)) that offers additional educational resources, documentation of all research, and additional opportunities to act and affect positive change.
- Recognition that behavioral change is affected by multiple levels of influence, from individual factors, social and interpersonal relationships, institutional and community factors, to public policy, and that this campaign is not designed to pressure people to change their habits, but rather offer unbiased information, resources for people to further educate themselves, and facilitate individual decision making with the long-term goal of affecting societal change.
- Follow the science and continually inform the public about the advancements and progress of cultured meat as it gets nearer to mass production/distribution.
- Continue to conduct surveys to measure and track the shift in attitudes toward both traditionally raised meat as well as cultured meat as an alternative, and adjust campaign strategies to maximize effectiveness.

- Developing messaging that focuses on the science behind cultured meat and eliminating misconceptions, presented in a way that emphasizes transparency of research and the objectivity of facts.
- Calling out ethically questionable practices by the U.S. meat industry and fostering social distaste for harmful and unsustainable production practices.

## APPENDIX SECTION



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
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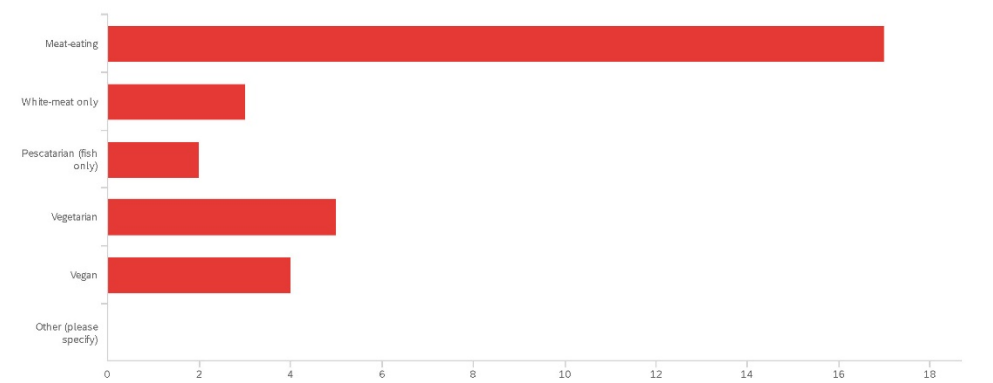
1	<p>Matthew Himes, a graduate student at Texas State University, is conducting a research study to assess whether a public awareness campaign using an educational approach with eye-opening facts about the meat production industry in the U.S. is likely to have an impact on an individual's meat-eating attitudes and behaviors. You are being asked to complete this survey because you have eaten or will eat meat produced by the U.S. meat production industry. Participation is voluntary. The survey will take approximately 30 minutes or less to complete. You must be at least 18 years old to take this survey. This study involves no foreseeable serious risks. We ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank. Your responses are anonymous or confidential. Possible benefits from this study are to inform you of some eye-opening facts and statistics about the U.S. meat production industry and its effects on human health, animal welfare, and the environment. Reasonable efforts will be made to keep the personal information in your research record private and confidential. Any identifiable information obtained in connection with this study will remain confidential and will be disclosed only with your permission or as required by law. The members of the research team, the funding agency (remove funding agency if study is not funded), and the Texas State University Office of Research Compliance (ORC) may access the data. The ORC monitors research studies to protect the rights and welfare of research participants. Your name will not be used in any written reports or publications which result from this research, (remove this sentence if not applicable to your study). Data will be kept for three years (per federal regulations) after the study is completed and then destroyed. You will receive no compensation for completing this study. If you have any questions or concerns feel free to contact Matthew Himes or his faculty advisor: Matthew Himes, graduate student Claudia Roeschmann, Professor School of Art and Design School of Art and Design 512 657 1920 512 245 2646 mh1683@txstate.edu cr29@txstate.edu This project #7152 was approved by the Texas State IRB on March 25th, 2020. Pertinent questions or concerns about the research, research participants' rights, and/or research-related injuries to participants should be directed to the IRB chair, Dr. Denise Gobert 512-716-2652 – (dgobert@txstate.edu) or to Monica Gonzales, IRB Regulatory Manager 512-245-2334 - (meg201@txstate.edu). If you would prefer not to participate, please do not fill out a survey. If you consent to participate, please select YES and complete the survey. Do you consent to participate?</p>	1.00	1.00	1.00	0.00	0.00	31
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#	Field	Choice Count
1	Yes	100.00% 31
2	No	0.00% 0

31

Showing rows 1 - 3 of 3

Q2 - What are your eating habits?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What are your eating habits? - Selected Choice	1.00	5.00	2.23	1.54	2.37	31

#	Field	Choice Count
1	Meat-eating	54.84% 17
2	White-meat only	9.68% 3
3	Pescatarian (fish only)	6.45% 2
4	Vegetarian	16.13% 5
5	Vegan	12.90% 4
6	Other (please specify)	0.00% 0

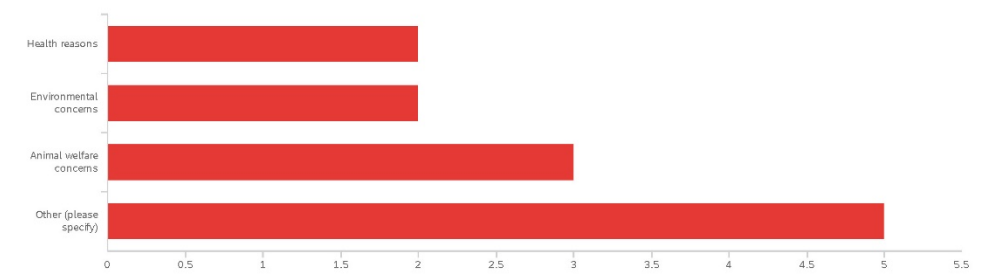
31

Showing rows 1 - 7 of 7

Q2\_6\_TEXT - Other (please specify)

Other (please specify)

Q3 - If you don't eat meat, why?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If you don't eat meat, why? - Selected Choice	1.00	4.00	2.92	1.11	1.24	12

#	Field	Choice Count
1	Health reasons	16.67% 2
2	Environmental concerns	16.67% 2
3	Animal welfare concerns	25.00% 3
4	Other (please specify)	41.67% 5

12

Showing rows 1 - 5 of 5

Q3\_4\_TEXT - Other (please specify)

Other (please specify)

All of the above

all of the above

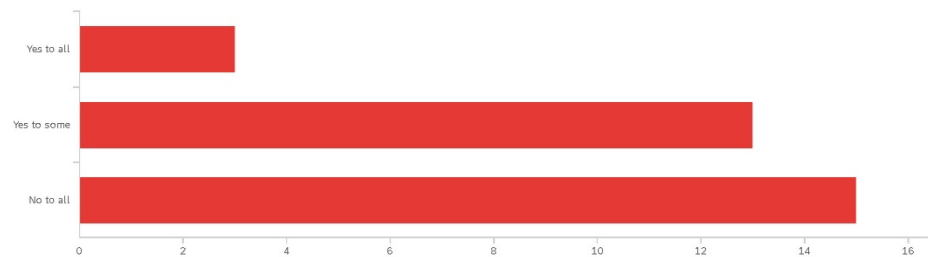
All of the above.

Just don't like red meat.

All of the above



Q4 - Prior to this survey, were you aware of any of the following facts about animal agriculture's environmental effects? Up to 51 percent of worldwide greenhouse gas emissions can be attributed to livestock and their byproducts (Goodland and Anhang, 2009). Approximately 45 percent of earth's global surface area is dedicated to livestock systems (Thornton, 2011). Animal agriculture is responsible for up to 1/3 of all fresh-water consumption in the world today (Gerbens-Leenes et al. 2013). 2,500 gallons of water are needed to produce 1 pound of beef. (Robbins, 2000)

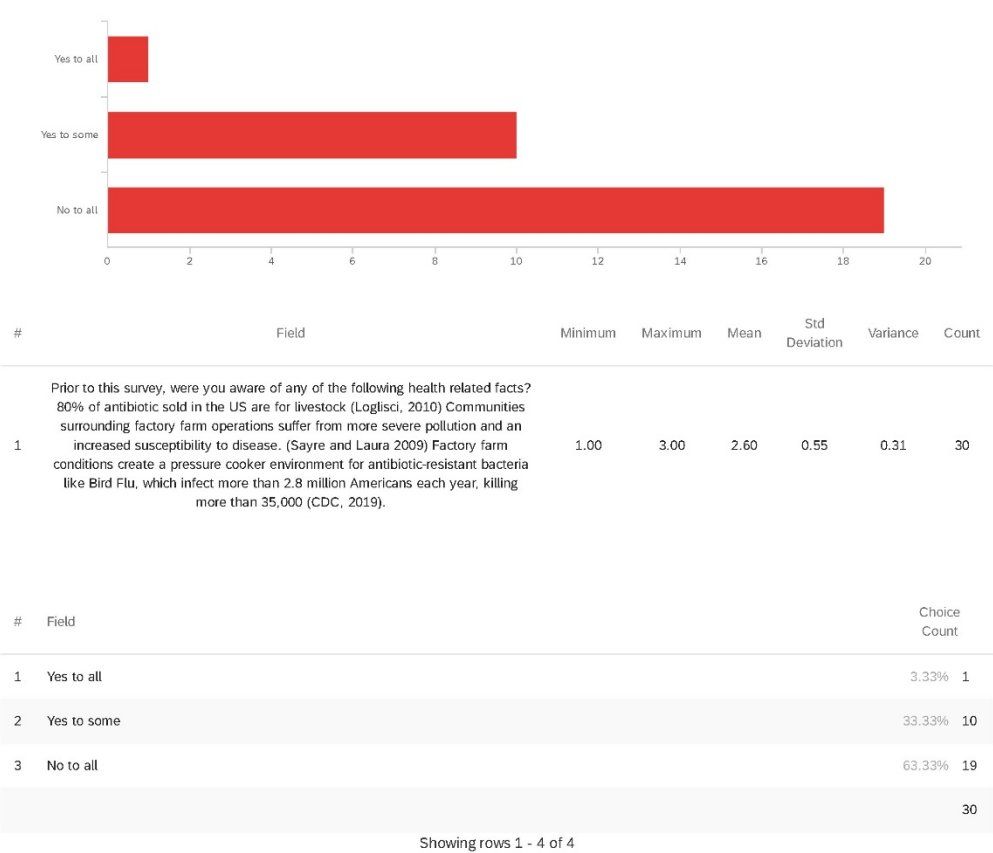


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Prior to this survey, were you aware of any of the following facts about animal agriculture's environmental effects? Up to 51 percent of worldwide greenhouse gas emissions can be attributed to livestock and their byproducts (Goodland and Anhang, 2009). Approximately 45 percent of earth's global surface area is dedicated to livestock systems (Thornton, 2011). Animal agriculture is responsible for up to 1/3 of all fresh-water consumption in the world today (Gerbens-Leenes et al. 2013). 2,500 gallons of water are needed to produce 1 pound of beef. (Robbins, 2000)	1.00	3.00	2.39	0.66	0.43	31

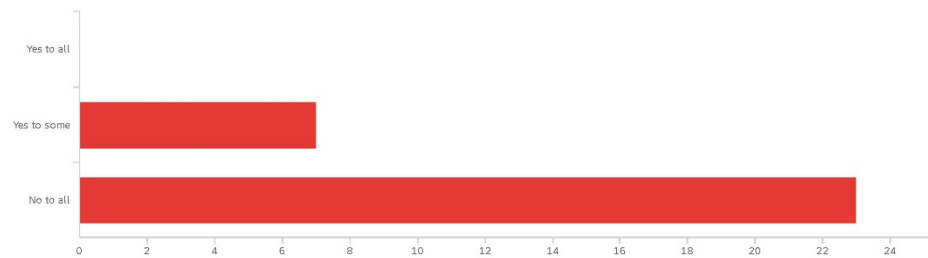
#	Field	Choice Count
1	Yes to all	9.68% 3
2	Yes to some	41.94% 13
3	No to all	48.39% 15

Q5 - Prior to this survey, were you aware of any of the following health related facts?

80% of antibiotic sold in the US are for livestock (Loglisci, 2010) Communities surrounding factory farm operations suffer from more severe pollution and an increased susceptibility to disease. (Sayre and Laura 2009) Factory farm conditions create a pressure cooker environment for antibiotic-resistant bacteria like Bird Flu, which infect more than 2.8 million Americans each year, killing more than 35,000 (CDC, 2019).



Q6 - Prior to this survey, were you aware of any of the following facts about animal welfare? 70 billion+ animals are killed for food worldwide every year, including 6 million every hour. That number is expected to double by 2050 (Compassion in world farming, 2017) Chickens bred for meat are forced to grow 65 times faster than their bodies normally would, and the industry continually seeks to increase their growth rate (Horton, 2006) Dairy cows typically live to their third lactation before being culled. Naturally, a cow can live for 20 years (Lymbery, 2012) More than 99% of all farmed animals endure the most intensive farming methods (Sentience Institute, 2019)



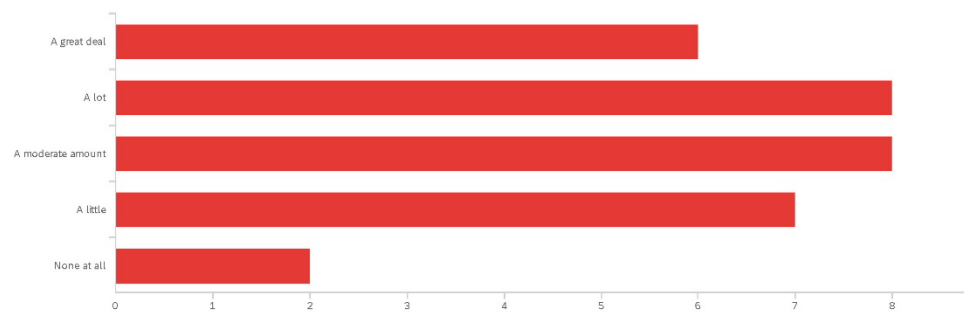
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Prior to this survey, were you aware of any of the following facts about animal welfare? 70 billion+ animals are killed for food worldwide every year, including 6 million every hour. That number is expected to double by 2050 (Compassion in world farming, 2017) Chickens bred for meat are forced to grow 65 times faster than their bodies normally would, and the industry continually seeks to increase their growth rate (Horton, 2006) Dairy cows typically live to their third lactation before being culled. Naturally, a cow can live for 20 years (Lymbery, 2012) More than 99% of all farmed animals endure the most intensive farming methods (Sentience Institute, 2019)	2.00	3.00	2.77	0.42	0.18	30

#	Field	Choice Count
1	Yes to all	0.00% 0

#	Field	Choice Count
2	Yes to some	23.33% 7
3	No to all	76.67% 23
		30

Showing rows 1 - 4 of 4

### Q7 - How do the facts listed above affect your attitudes toward eating meat?

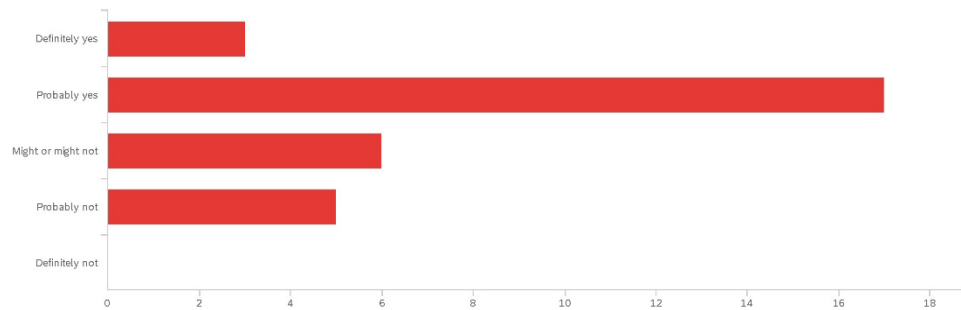


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How do the facts listed above affect your attitudes toward eating meat?	1.00	5.00	2.71	1.20	1.43	31

#	Field	Choice Count
1	A great deal	19.35% 6
2	A lot	25.81% 8
3	A moderate amount	25.81% 8
4	A little	22.58% 7
5	None at all	6.45% 2
		31

Showing rows 1 - 6 of 6

Q8 - In you opinion, would an awareness campaign shedding light on the hard truths about meat production in the U.S. be an effective deterrent from eating meat?

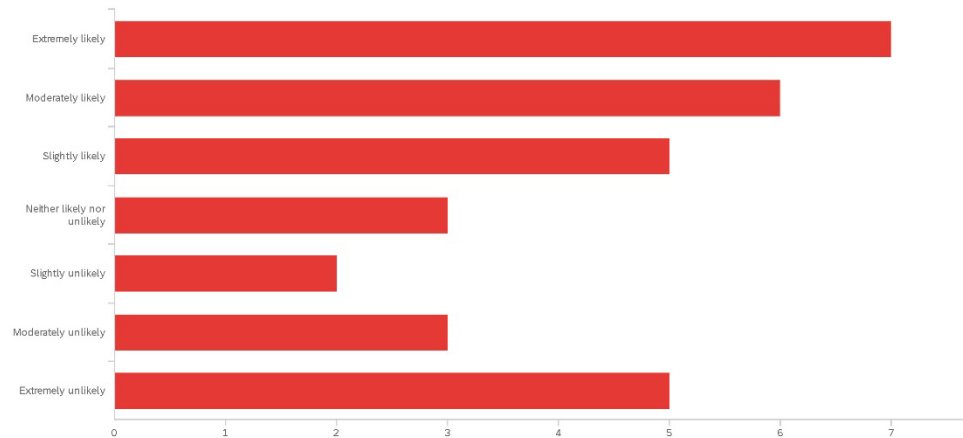


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	In you opinion, would an awareness campaign shedding light on the hard truths about meat production in the U.S. be an effective deterrent from eating meat?	1.00	4.00	2.42	0.87	0.76	31

#	Field	Choice Count
1	Definitely yes	9.68% 3
2	Probably yes	54.84% 17
3	Might or might not	19.35% 6
4	Probably not	16.13% 5
5	Definitely not	0.00% 0
		31

Showing rows 1 - 6 of 6

Q9 - If there was a satisfactory alternative to traditionally raised meat (i.e. plant-based proteins, lab grown meat, etc.), would you be open to switching?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If there was a satisfactory alternative to traditionally raised meat (i.e. plant-based proteins, lab grown meat, etc.), would you be open to switching?	1.00	7.00	3.52	2.15	4.64	31

#	Field	Choice Count
1	Extremely likely	22.58% 7
2	Moderately likely	19.35% 6
3	Slightly likely	16.13% 5
4	Neither likely nor unlikely	9.68% 3
5	Slightly unlikely	6.45% 2
6	Moderately unlikely	9.68% 3
7	Extremely unlikely	16.13% 5
		31

Showing rows 1 - 8 of 8

**End of Report**

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