Introduction

Meatless Monday as most people know it today began in 2003 with the work of ad man Sid Lerner and Dr. Bob Lawrence, the founding director of the Johns Hopkins Center for a Livable Future. What began as a health-focused response to the problem of animal production and consumption has evolved today into a movement addressing health, environment, climate, human and animal welfare with one simple message, “Once a week, cut out meat.” But the idea of a meatless day was not totally new in 2003; it harkened back to the United States as it entered World War I 100 years ago. National meatless (and wheatless) days were introduced in 1917 to conserve rations for troops fighting overseas in World War I and, later, World War II. But the impacts of these initiatives went far beyond rationing to mobilize communities, expand education and promote public health. Lessons from these early initiatives have striking similarities to public health issues today and may serve to add context and wisdom as we navigate the world around us. With the focus on reducing at-home consumption of meat during the first and second World Wars, Meatless Tuesdays (later Meatless Mondays) was founded on principles that remain relevant and effective today in the modern effort to reduce meat consumption.

World War I

The first recorded meatless day actually pre-dated the United States World War I meat reduction efforts. In Great Britain, meatless days were initiated in 1916, but by May 1917, they were abolished because eating meatless put too much strain on the bread supply. In the United States, the earliest newspaper mention of meatless days is on May 14, 1917, when Mississippi Governor Theo C. Bilbo issued a proclamation urging Mississippians to have one meatless and one wheatless day each week throughout the war.¹ Leader of the Wisconsin State Council of Defense Magnus Swenson instituted the first official, statewide Meatless Tuesday on September 18, 1917, in Wisconsin.²

The history of a national meatless day begins with Herbert Hoover and the Food Administration, founded and funded by Congress in August 1917. Led by Hoover, the Administration was tasked with reducing meat, wheat and dairy consumption in American homes in order to save these products for American and Allied troops in the European theater. Unlike strict rationing in many European countries, the Food Administration chose to pursue voluntary reduction over mandatory restrictions and launched a food consumption campaign that led to a 15 percent reduction in overall household food consumption between 1918 and 1919.³ At the core of this campaign was a national Meatless Tuesday and Wheatless Wednesday campaign announced by Hoover beginning October 30. Hoover was the right man for the job. Born in 1874 to an Iowan Quaker community, Hoover studied mining at Stanford University, where he met his wife Lou Henry, the only woman studying geology at the college at the time.
An engineer, Hoover became famous for his skillful orchestration of the movement of vast amounts of food to Belgium and other European countries for famine relief during the war. Raised and trained in a time when a belief in the power of science was on the rise, Hoover, like many others of his time, believed that engineering and other scientific disciplines could be used to construct a better—even perfect—society. This better society would be more fair, more efficient and more scientific. Hoover’s role in the Food Administration reflected his belief in the capacity of rational science to shape society. In fact, the use of mass media and other forms of propaganda to encourage meatless days was a form of social engineering that worked successfully on middle- and upper-class meat consumption at the time.

A large swathe of participation in meatless days came from worker associations. The Traveling Salesman Association pledged over 600,000 salesmen to observe one meatless day per week. Similarly, the Food Administration Restaurant and Hotel Committee adopted beefless Tuesdays and Fridays across the nation.\(^4\)\(^5\) One article writes, “John McE Bowman of the US Food Commission has reports from every hotel association, restaurant organization, and many other public dining room bodies that they will make Tuesday beefless for the period of the war.”\(^6\) The first national beefless Tuesday in hotels and restaurants was October 9, 1917, even before Hoover’s national Meatless Tuesday announcement.

In January, 1918, a bill was introduced in the House that would make meatless days in hotels and restaurants mandatory by giving the Food Administration the ability to enforce meatless days. It is unclear whether the bill was passed or whether the Food Administration actually enforced meatless days. But in New York City, meatless days were so enforced that one newspaper article reports the trial and punishment of 57 city restaurant owners for not observing meatless Tuesdays. The owners found guilty were ordered to close their restaurants for one day: the following meatless Tuesday.\(^7\)

At the beginning of the new year (1918), several events occurred that marked the end of the government push for meatless days. In January, a

---

**Lessons from World War I**

- Voluntary reduction over mandatory restrictions, including Meatless and Wheatless Days during WWI led to a 15% reduction in overall household food consumption between 1918 and 1919.
- The use of mass media and other forms of propaganda to encourage meatless days worked most successfully on middle- and upper-income meat consumption.
- A large swathe of participation in meatless days came from worker associations, hospitals and restaurants.
- As working class incomes rose during the war thanks to industrial jobs, working class families were able, and willing, to increase their meat consumption, which was very low to begin with.
- Reducing meat and other sacrifices were viewed as patriotic, contributing to the nation’s security.
surplus of cattle caused by a lack of transportation led Hoover to announce a hiatus from meatless days in the western states in order to consume the surplus.\(^9\) That same month, Armour Packing and Company released a study asserting that meat consumption by the public had decreased by 25 percent. Meat production, however, increased dramatically, and Armour and other meat packing companies were doing more business than ever with Uncle Sam.\(^9\) In March of 1918, a poor crop harvest led farmers to feed immature corn to pigs, fattening them beyond normal sizes. When all these fattened pigs came to market, combined with the increased number of pigs and cows produced in the Midwest, there was an oversupply of meat and an undersupply of transportation to take this meat to Allied troops. Hoover declared a 30-day rest from meatless days across the country to consume surpluses, and they were not reinstated again during the war.\(^10\)

The success of the Meatless Tuesday campaign actually reducing meat consumption is debated. While many middle- and upper-income households successfully decreased their meat consumption by several pounds per person day, many lower-income households actually purchased more meat during the war. One disgruntled journalist wrote. “Six days out of the week are meatless days to the salaried man here,”\(^11\) highlighting the already low meat consumption of the working and lower classes. As working class incomes rose during the war thanks to industrial jobs, working class families were able, and willing, to increase their meat consumption.\(^12\) Levenstein writes that, “He [Hoover] ascribed ‘these curious developments,’ which caused beef consumption to actually rise over ‘pre-war normal’ to the ‘increasing prosperity of the industrial classes.’”\(^13\) A 1919 book on meat consumption in the war years shows that per capita consumption of beef

\begin{table}[h]
\centering
\begin{tabular}{l|cccccccc}
\hline
Month & 1911 & 1912 & 1913 & 1914 & 1915 & 1916 & 1917 & 1918 \\
\hline
January & 96.21 & 95.33 & 97.35 & 98.34 & 97.16 & 96.35 & 96.23 & 96.21 \\
February & 98.17 & 100.32 & 96.91 & 94.79 & 95.00 & 95.69 & 95.87 & 95.99 \\
March & 97.44 & 98.28 & 96.92 & 95.78 & 96.00 & 95.38 & 96.00 & 96.00 \\
April & 99.39 & 97.47 & 98.16 & 97.45 & 97.03 & 96.80 & 97.03 & 97.03 \\
May & 98.22 & 93.13 & 99.77 & 97.46 & 97.25 & 96.91 & 97.25 & 97.25 \\
June & 96.32 & 94.47 & 91.76 & 94.58 & 95.00 & 94.78 & 95.00 & 95.00 \\
July & 94.88 & 94.24 & 89.04 & 94.24 & 94.78 & 94.24 & 94.78 & 94.78 \\
August & 97.10 & 94.58 & 92.02 & 94.58 & 94.78 & 94.24 & 94.78 & 94.78 \\
September & 94.06 & 93.13 & 94.62 & 93.13 & 93.45 & 93.71 & 93.71 & 93.71 \\
October & 58.66 & 58.32 & 91.41 & 58.32 & 58.32 & 58.32 & 58.32 & 58.32 \\
November & 87.99 & 89.24 & 89.86 & 89.24 & 89.86 & 89.24 & 89.86 & 89.86 \\
December & 97.72 & 91.49 & 86.00 & 91.49 & 86.00 & 91.49 & 86.00 & 86.00 \\
\hline
Total for year & 96.31 & 97.70 & 98.23 & 101.00 & 94.93 & 95.32 & 93.92 & 91.87 \\
\hline
\end{tabular}
\caption{BEF—Per cent total consumption of total production.}
\end{table}

\begin{table}[h]
\centering
\begin{tabular}{l|cccc}
\hline
Month & 1911 & 1912 & 1913 & 1914 \\
\hline
January & 6.14 & 6.47 & 6.53 \\
February & 5.81 & 6.01 & 6.29 \\
March & 6.26 & 6.49 & 6.68 \\
April & 5.10 & 5.11 & 5.45 \\
May & 3.91 & 6.42 & 5.39 \\
June & 6.56 & 6.60 & 5.54 \\
July & 6.10 & 6.16 & 6.23 \\
August & 6.46 & 6.49 & 6.37 \\
September & 6.63 & 6.47 & 6.59 \\
October & 7.38 & 7.28 & 7.70 \\
November & 7.38 & 6.91 & 7.31 \\
December & 7.37 & 6.64 & 6.79 \\
\hline
Total for year & 80.98 & 75.32 & 73.88 & 71.55 \\
\hline
\end{tabular}
\caption{BEF—Per capita consumption (pounds).}
\end{table}
and pork actually rose between 1917 and 1918, when Meatless days were in effect, although beef consumption had dropped significantly in 1917 and the years prior to the war.\textsuperscript{14}

Interestingly, while poorer and working class households were eating more meat, meat consumption decreased in wealthier households and institutions. One Minnesota hospital boasted that “the per capita consumption of meat since January 1 was a small fraction under one and one-half pounds a week and yet no one had complained of not getting enough.”\textsuperscript{15}

Compared to 1909 consumption of between 139 and 200 pounds of meat per year of wealthy citizens\textsuperscript{16}, the consumption of the hospital, at 78 pounds, per person year, is remarkably low. Not all wealthy citizens were doing their part, however. The Hotel Majestic in New York Cities tried to go meatless for two weeks in late 1917 and customers were not happy. They demanded more meat and simply paid more money for scarce items, rather than purchasing the cheaper substitutes.\textsuperscript{17} The overall “success” of the meatless days most likely lies more in the prolific production of American farmers during the war that complemented the self-guided reduction of meat consumption of consumers.
World War II

In World War II, President Roosevelt revisited the campaign of World War I’s Meatless Tuesdays in order to save vital transportation for munitions, but these efforts were less visible in the presence of formal rationing. Unlike World War I, World War II’s meatless days were aided with rationing cards limiting the amount of meat and other staples each family could buy. Many families ate meatless regardless of their patriotism because good quality meat was hard to obtain due to intense rationing.

On Roosevelt’s suggestion, 52 federal cafeterias in Washington, DC, began meatless and fishless Wednesdays on September 2, 1942. First Lady Eleanor Roosevelt joined in and ensured that meatless days were observed by the first family and White House events. Mayor Fiorello LaGuardia of New York City ordered two meatless days per week in the city beginning January 22, 1945. The Las Vegas Restaurant Owners Association announced their voluntary adoption of meatless Mondays and Tuesdays on July 23, 1945.

But at the end of the war and in the post-war boom when rationing on meat was lifted, meat consumption rose from approximately 90 pounds of beef per person annually to 125 pounds annually in 1948.

Lessons from World War II

- The World War II meatless campaign was more scattered and individual than the campaign in World War I, but, in conjunction with rationing, appears to have been more successful than World War I.
- Federal cafeterias and restaurants were major adopters of meatless days during World War II.
The Post-War Era

Post-war life brought economic prosperity to many Americans. New agricultural innovations, increased corn and wheat production, and vastly improved transportation resulted in a decrease in the cost of meat, while rising disposable incomes and a growing middle class clamored for more. Meat consumption in the post-WWII period increased steadily until its peak in 2002. The post-war period also brought the supermarket and processed and fast foods to American life, which in turn promoted meat consumption.

Even with this apparent reversal in the achievement of reducing meat consumption, the success of meatless days goes beyond the actual meat consumption, and lessons learned extend to today. Meatless days managed to mobilize countless independent and disparate groups to a single cause. Hotel and restaurant owners, traveling salesmen, lumberjacks, hospital and school administrators, women, and more responded to the call for meat reduction (and other food conservation efforts). Further, as seen in World War II, the meatless campaign was one of the first government-run programs that taught people what and how to eat. Nutritional guidelines set out during the war continued to affect American homes long after restrictions on meat and wheat consumption were lifted. One example is the free and reduced lunch program that, started in 1946 by President Truman in response to wartime calls for a better-fed and more nutritionally-strong population, still continues to support millions of American children today.

Lessons from the Post-War Era

▶ Changes in food production and farming practices brought changes in the food system that set the stage for increased meat consumption, as well as processed and fast foods.

▶ World War II had a large influence on food production practices that have lasting effects today on Americans’ health and waistline, including intensive crop production, fertilizers, over supply of corn and new food technology.

▶ Government nutrition guidelines and food programs aimed at improving nutrition continue today.
Meatless Monday Today

While the original Meatless Tuesdays sought to reduce meat consumption to save meat for the troops, modern Meatless Monday focuses on reducing overall meat consumption for individual health and the health of the planet. In 2003, recalling the meatless days of the World Wars, ad man Sid Lerner and Dr. Bob Lawrence, the founding director of the Johns Hopkins Center for a Livable Future created “a public health campaign with a creative grassroots marketing strategy” to encourage people to reduce their meat consumption by 15 percent. This reduction was in accordance with a 2000 report by the Surgeon General and the American Heart Association, recommending that Americans reduce their meat and saturated fat consumption by 15 percent. According to the Environmental Protection Agency, in 2010 agriculture and forestry produced 24% of greenhouse gas emissions globally. Animal agriculture alone accounts for 14.5% of all global greenhouse gas emissions. As the body of evidence has grown, the goal of the campaign has expanded to harness the actions of individuals, communities and institutions to address the health of the planet by reducing the environmental burden associated with meat production.

High meat consumption in our modern diets can also be detrimental for one’s own health. One study on mortality estimated that if people substituted one serving of red meat each day for other foods including fish, poultry, nuts, low-fat dairy, and whole grains, their mortality risk decreased by 7 to 19 percent. Those who eat meat are at higher risk for heart disease, stroke, type 2 diabetes and obesity and are 17 percent more likely to develop bowel cancer than those who eat less meat.
Meatless Monday Then and Now

The rationale, definitions and actions surrounding the call for meatless days have changed over the last hundred years, as outlined in the table below; yet these differences provide important context for understanding the situation Americans face today. Comparing modern day Meatless Monday with wartime meatless days also highlights commonalities its relevance for today and beyond in several key areas.

### Meatless Monday - Then and Now

<table>
<thead>
<tr>
<th></th>
<th>World War I and II</th>
<th>Modern Meatless Monday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original rationale</td>
<td>Save resources for troops</td>
<td>Reduce saturated fat</td>
</tr>
<tr>
<td>Other reasons</td>
<td>Nutrition education ▶ Educate about food systems ▶ Gardens</td>
<td>Benefits of plant-based diets on health, environment, climate and animal welfare</td>
</tr>
<tr>
<td>The “ask”</td>
<td>Go without meat for your country - patriotism</td>
<td>▶ Go without meat for your health (individual) ▶ Go without meat for the health of the planet (community)</td>
</tr>
<tr>
<td>Meat defined</td>
<td>Beef, pork (not including organ meats), poultry and fish were excluded</td>
<td>Red meat, poultry, +/- seafood</td>
</tr>
<tr>
<td>Champions</td>
<td>Individuals and organizations</td>
<td>Individuals and organizations</td>
</tr>
<tr>
<td>Communication</td>
<td>▶ Posters ▶ Radio ▶ Newspapers</td>
<td>▶ Social media ▶ Web sites ▶ Signs and posters</td>
</tr>
</tbody>
</table>

### National Health, Global Health

In early Meatless Tuesday campaigns during the First World War, the health of citizens was tied directly to the health of the nation. Citizens’ health was important first to ensure their fighting and farming abilities and second to ensure their intellectual capacity for problem solving and innovation. The main slogan for the campaign, “Food will win the war,” highlights these notions.

A similar focus on food and national security exists in the modern Meatless Monday campaign. In the United States, 40 percent of all food produced is wasted. Americans eat an average of 1.5 times the protein they need each day and consume 193 pounds of meat annually. While red meat consumption has decreased since 2008, poultry consumption has increased from 28 pounds annually in 1960 to 91 pounds in 2016. Access to food in poorer communities is often limited to processed foods and many people worldwide go hungry every day despite adequate production. The health of Americans is threatened by heart disease, cancer, type 2 diabetes, and stroke due to overconsumption of meat, while health care systems are burdened by an extra cost of more the $1 trillion annual due to diet-related illnesses.

While overproduction and overconsumption put Americans at greater risk of disease, under-distribution and the lack of availability of nutritious food globally raises the risk of refugee crises, warfare, and more. The security of the world is dependent upon the adequate, sus-
tainable, and fair distribution of food over the coming decades. Ensuring that people in wealthier nations with higher per capita meat consumption such as the United States do not consume more than their fair share of resources by reducing meat consumption is imperative of the effort.

Meatless Monday in Schools and Kitchens

The push for the original meatless days in World War I was accompanied by an influx of pamphlets, books, and classes that were intended to teach the modern housewife about nutrition in the family. One such book, *Foods that Will Win the War and How to Cook Them*, explains, “Although most persons believe that protein can only be obtained from meat, it is found in many other foods, such as milk…dried peas, beans…lentils and nuts.” Educating readers about the many ways to get enough protein without eating meat was important because, as the author writes, “As a nation we eat and waste 80 per cent more meat than we require to maintain health…only a small quantity of meat is necessary to supply sufficient protein for adult life.”

New nutrition education also appeared in schools where children were recruited to raise chickens, tend gardens, and get their community members to sign food pledge cards. The wartime school gardening curriculum was the first nationally promoted school curriculum in US history.

For the wartime efforts, recipes were developed and cooking guidance was provided through women’s groups, magazines, and extension educators. They were “planned to solve the housekeeper’s problem” by giving substitutes, showing how to stretch smaller portions of meat, and giving suggested meal plans, all at a lower cost to the family budget. Instruction books were intended for home economists, not housewives, and were intended to teach readers the basics of food conservation in wartime.

Modern Meatless Monday also uses education to make consumers aware both of the impact of their food and of nutritional alternatives. By working with school and workplace lunch providers, placing information tables at events, and more, Meatless Monday addresses the continuing concern among many Americans of getting enough protein in their diets through consumption of meat and animal products.
Meatless Mondays and Social Movements: Progressivism

Spanning from the 1850s to mid-1920s, Progressivism, a political ideology formed in response to immense social and economic changes, was one of the dominant ideologies when meatless days were first introduced during WWI. In fact, Herbert Hoover, the director of the Food Administration whose referendum led to the first national meatless day, was considered a well-known Progressive figure. Some of the progressive ideologies that influenced the creation of meatless days remain relevant through WWII and into today including concern for the poor and the redistribution resources.

A concern for the poor by the upper-income classes was nurtured in the closely packed cities of the late nineteenth and early twentieth century. Progressives believed that, unlike social Darwinism theories that poverty was caused by genetically inherited tendencies towards laziness, debasement, and criminality, the poor could be raised up through aid and education to become civilized middle class people. This belief led the upper classes to work to bring education to the masses through a variety of mechanisms including public education and land grant institutions. These land grant institutions later became dispersal points for meatless and waste-saving education for wartime food saving. Another aspect of concern for the poor is evident in the rhetoric used to encourage food saving. Most of those forgoing meat, wheat, and sugar were the middle and upper classes, and many did so in the name of helping the “poor” Allies in Europe who were reported to be suffering far more than they, privileged Americans, did. Land grant institutions once again became knowledge originator points for food saving and waste reducing techniques. Rationing focused on ensuring that the poor were able to afford food despite scarcity. The modern-day call to preserve the planet for the better of everyone harkens back to those earlier campaigns and their Progressive progenitors.

Meatless Monday and Social Movements: Vegetarianism

The vegetarian diet has been a known lifestyle choice for thousands of years. Pythagoras, the ancient Greek mathematician and philosopher, advocated for vegetarianism because he believed that eating meat contaminated the soul. Ovid and Plutarch, born some 500 years later than Pythagoras, abhorred the killing of innocents and thus elected to eat all-vegetable diets. The Hindus in India began to observe vegetarian diets even earlier than the Greeks. By the time of the writing of the Vedas between 1500 and 1000 BCE, vegetarianism was taught as a tenet of the faith. In more modern times, partial vegetarianism was popular in Catholicism as a way to express penance for sins. Since the Romantic period of the 18th and early 19th centuries, a heightened sense of love for animals and abhorrence of pain and death has strengthened the moral argument for vegetarianism in Western countries. Upton Sinclair’s 1906 novel, The Jungle, further raised awareness of the problems in the meat packing and larger food production industry. Authors Mary and Percy Shelley and Alexander Pope and the poet Lord Byron were well known vegetarians. Percy Shelley even wrote the tract A Vindication of the Natural Diet arguing for a vegetarian diet.
In the late 19th and early 20th centuries, the focus on vegetarianism gained popularity out of a concern for the health of the diet of the contemporary elites. With meals rich in heavy cream sauces, meats, alcohol, and sugar, an epidemic of “indigestion” and other diet-related diseases and discomforts plagued the middle and upper classes. John Harvey Kellogg, inventor of Kellogg Corn Flakes and forefather of the Kellogg cereal empire, founded the Battle Creek Sanitarium in Battle Creek, Michigan, to address the health complaints of the wealthy. The institute was graced with some of the most famous American names of the time including Sojourner Truth and Mary Todd Lincoln.

Kellogg’s philosophy at the sanitarium revolved around a critique of the contemporary American diet. He believed that the high consumption of meat and dairy products was ruining the American stomach and creating all manner of health problems. From its inception, his sanitarium was one of the first American institutions to be wholly vegetarian. Kellogg served his patients cornflakes, in order to clean their bowels and organs and even invented protein alternatives like nutlose, a protein loaf made from nuts.

The modern-day call to sacrifice harkens back to the morality frequently invoked in the past, often in connection with religion, to justify vegetarianism.

Communicating the Meatless Monday Message: the mode and the messengers

The mode of delivering information and education has evolved drastically over the past hundred years from early radio — first used as a mass communication tool by the government in World War I — and poster ads to the use of social media sites like Facebook, Instagram, and Twitter today. Early meatless days faced the task of spreading information to less-connected people across a wide expanse of land while the Modern Meatless Monday campaign must work to distinguish itself in an ear of “information overload.” Despite their differences, the two campaigns spread messages in strikingly similar ways. Social media sites like Facebook and Instagram offer platforms similar to posters with images and text combined and viewed by many people, while Twitter provides a way to spread slogans even more efficiently than in earlier campaigns.

During World War I, average citizens as well as local institutions and community groups were engaged in spreading the message about food production, health and the call to sacrifice for the country. Today, Meatless Monday works in much the same way, relying on individuals, communities and institutions to voluntarily share the relevance and feasibility of meat reduction for health and the environment.
Homemakers as Messengers

Homemakers controlled the market purchases and thus, had a major impact on meat consumption during the war. Advertising, ladies’ magazines, and other sources sought to encourage women to reduce their family’s meat consumption by linking the effort to ideas of patriotism and health families. For housewives, the issue of reducing meat consumption was posed as being a good mother and wife, protecting their men at war and their families at home through healthy, economical eating.

One medium in particular held sway over housewives and was utilized to influence their purchasing and consumption habits. Because a large portion of women during the time lived on isolated homesteads away from other women, the invention of the radio brought a way for women to connect and learn from each other across long distances. Many women would listen to the radio as they worked, and the radios, responding to women’s interest, began offering homemaking educational radio using knowledge from home economists. Largely produced by women for women, homemaking radio program were most popular from the 1920s to the 1940s and thus influenced women most during World War II. Home economists on the programs offered suggestions for economizing and “Hooverizing” alongside the same messages of patriotic housewifery that simultaneously came from the government. “The patriotic housewife finds her little domestic boat in uncharted waters.”

“To the Women of the Universities and Colleges; the United States Food Administration calls you to its service. Our need is so great that we appeal to you to prepare yourselves and to enlist for the great work that must be done.”

“Begin to-day to eat more corn meal and hominy grits in place of wheat flour and wheat breakfast foods” is the message the United States Department of Agriculture is sending out broadcast to housewives.”
Children as Messengers

As most advertisers know today, children are an ideal way to influence consumption behaviors of parents. To that end, much of the meatless effort was concentrated on schools so that children would bring home these ideas to their parents. For children, the issue of meatless days was posed as ‘doing their part’ for the war effort and saving soldiers. They were educated in schools about conservation and asked to bring information to their mothers. They were also recruited to canvass neighborhoods to get people to sign food pledge cards.

“I have a little boy [with] a decided sweet tooth. He likes lots of sugar…His mother finally conceived the idea that he might save some sugar for a soldier. There is something appealing and romantic about a soldier and it struck his fancy…I wish that every child un 80 in the state of Minnesota might do just the same thing.”

“FOOD IS FUEL FOR FIGHTERS. Do not waste it. Save WHEAT, MEAT, SUGARS AND FATS. Send more to our Soldiers, Sailors and Allies.”

Farmers and other Men as Messengers

Men on the home front who were reminded of their fellow men’s sacrifice and often felt guilty for not being in the war were assured that they could do their part at home. Advertising targeted at men focused more on increasing production than on reducing meat consumption.

“If you cannot get into the ranks, you can yet fight with your fellows who have gone. Will you? The battle-field is here. The battle is now. The struggle for Democracy is within you. It is as important for you to do your duty at home as it is for the boys to do theirs “over there.” It is as necessary to provide food for our armies, and for the armies and families of the Allies, as it is to face the enemy. Therefore,

1. Be intelligent; inform yourselves about food.
2. Create more food if you can.
3. Do not waste any.
4. Do not allow others to waste any.
5. Obey the food regulations, — they are the careful and honest work of those who know what they are doing.
6. By every legal means prevent their violation by others.
7. Help everyone who is trying to serve in the cause of food.
8. Be aggressive agents of the Food Administration wherever you go. What you are to be through life will be decided by what you do to-day in this crisis of human history.”

(Food and the War)
Community Groups and Institutions as Messengers

Women’s committees and other groups of women regularly met during World War I for canning parties, gardening parties, and more. Women’s informal friendships and familial networks were one of the primary modes of sharing knowledge and were often depended upon in order to teach gardening, canning, and other economizing techniques to large portions of the population. Women’s auxiliary committees translated recipes into other languages for Minnesota immigrants.

A.D. Wilson, Minnesota’s food administrator, did outreach to lumberjacks for food conservation and meatless days. Cooks went to conservation classes and most camps “observed meatless days and reduced the quantity of meat used...”

Hotels, institutions and grocery vendors were also involved.

“John McE Bowman of the US Food Commission has reports from every hotel association, restaurant organization, and many other public dining room bodies that they will make Tuesday beefless for the period of the war.”

NYC Hotels and restaurants savings on Meatless Tuesday, November 13: 193,545 pounds, or 96.75 tons.

Massachusetts hotels and restaurants October 1917 savings: 1,281,840 pounds of meat.

“The wholesale grocers early evidenced a willingness to help through reorganization of their machinery and through inaugurating a campaign of education on the part of their salesmen with the retailers of the country. They undertook to urge upon retailers, and through them upon consumers, measures to save food and fuel, to push the sale of wholesome substitutes for wheat and other commodities of which there is shortage, and to give information to and assist the retailers in the food conservation program in the matter of display of foods, saving in delivery, and shortening of credit.”

“Many of them [restaurants and hotels] have been leaders in introducing the meatless Tuesday and the wheatless Wednesday.”
Food Pledge and Home Cards

Food pledge cards hung in households and offered, on one side, a reminder of the household managers’ commitment to conserve food; on the other side, the “home card” offered guidance about how to uphold the pledge. More than 11,024,329 pledges were signed.

The Pledge

“Food Administration, Washington, D. C: I am glad to join you in the service of food conservation in our United States and I hereby accept membership in the United States Food Administration, pledging myself to carry out the directions and advice of the Food Administrator in the conduct of my household in so far as my circumstances permit.”

The Home Card

HOME CARD. UNITED STATES FOOD ADMINISTRATION What you can do to help win this war. OUR PROBLEM is to feed our Allies this winter by sending them as much food as we can of the most concentrated nutritive value in the least shipping space. These foods are wheat, beef, pork, dairy products and sugar. OUR SOLUTION is to eat less of these and more of other foods of which we have an abundance, and to waste less of all foods.

BREAD AND CEREALS.—Have at least one wheatless meal a day. Use corn, oat, rye, barley or mixed cereal rolls, muffins, and breads in place of white bread certainly for one meal and, if possible, for two. Eat less cake and pastry. As to the white bread, if you buy from a baker, order it a day in advance; then he will not bake beyond his needs. Cut the loaf on the table and only as required. Use stale bread for toast and cooking.

MEAT.—Use more poultry, rabbits, and especially fish and sea food in place of beef, mutton, and pork. Do not use either beef, mutton, or pork more than once daily, and then serve smaller portions. Use all left-over meat cold or in made dishes. Use soups more freely. Use beans; they have nearly the same food value as meat.

MILK.—Use all of the milk, waste no part of it. The children must have whole milk; therefore, use less cream. There is a great waste of food by not using all skim and sour milk. Sour milk can be used in cooking and to make cottage cheese. Use buttermilk and cheese freely. FATS (butter, lard, etc.).—Dairy butter has food values vital to children. Therefore, use it on the table as usual, especially for children. Use as little as possible in cooking. Reduce the use of fried foods to reduce the consumption of lard and other fats. Use vegetable oils, as olive and cottonseed oil. Save daily one-third of an ounce of animal fat. Waste no soap; it contains fat and the glycerine necessary for explosives. You can make scrubbing soap at home, and, in some localities, you can sell your saved fats to the soap maker, who will thus secure our needed glycerine.

SUGAR.—Use less candy and sweet drinks. Use less sugar in tea and coffee. Use honey, maple syrup, and dark syrups for hot cakes and waffles without butter or sugar. Do not
frost or ice cakes. Do not stint the use of sugar in putting up fruits and jams. They may be used in place of butter.

VEGETABLES AND FRUITS.—We have a superabundance of vegetables. Double the use of vegetables. They take the place of part of the wheat and meat, and, at the same time, are healthful. Use potatoes abundantly. Store potatoes and roots properly and they will keep. Use fruits generously. FUEL.—Coal comes from a distance, and our railway facilities are needed for war purposes. Burn fewer fires. If you can get wood, use it.

**Conclusion: Meatless Monday and Meaningful Impact**

Although Meatless Monday looks different than when the war-time concept of a meatless day first emerged, its prevailing impacts shape the movement today. Modern Meatless Monday advances objectives of wartime activists and broadens the relevance of Meatless Monday for modern consumers in several important ways. First, in addition to saving resources, meatless days during the world wars were used to educate people about food systems and nutritional intake. They were a part of larger efforts that included home and school gardens, wheatless days, and more. In the same way, modern Meatless Monday works to teach about the benefits of a plant-based diets and perils of high meat consumption. Second, wartime meatless days asked Americans to express patriotism for their country by forgoing the pleasures of meat. Modern Meatless Mondays asks citizens to make changes for the better of the planet and all people on it. Third, individuals and organizations (including restaurants, hospitals and work associations) took up the messages of early meatless days. Modern Meatless Mondays are championed in similar ways by organizations and individuals alike. Finally, early meatless days communicated the movement through posters, newspapers, and radio. Modern Meatless Monday spreads messages through social media in formats not unlike early meatless days. In all these ways — education, altruism, coalition-building and communication — the modern movement bears a great deal of resemblance to its predecessors.
Appendix 1

Themes of Meatless Days - Then and Now

1. Meatless days sought to educate people about their food systems and nutritional intake. They were a part of larger efforts that included home and school gardens, wheatless days, and more. In the same way, modern Meatless Monday works to teach about the benefits of a plant-based diets and perils of high meat eating.

- School garden education was one of the first nationally promoted curriculums in the country. President Wilson funded school gardening programs using public defense funds, recognizing the national security importance of gardening and food system education.

- Extension education in gardening and canning classes during World War I parallels modern gardening and cooking education (Master Gardeners, Extension) that teaches the public how to prepare and consume healthy plant-based meals.

- The public school system employed gardening education in World War I.

- Victory gardens were used to educate the public.

- Home economists simultaneously helped housewives to cope with food scarcity (or less meat and wheat) by educating them about nutrition.

- USDA used rations to conduct first research campaign on home consumption habits.

- World War I was the first time home economists were in federal positions.

- World War I cookbooks and instruction books were intended to educate housewives that meat is not the only source of protein and offered suggestions on how to cook nutritionally complete meals for a family without meat.

- In 1946 President Truman signed the National School Lunch Act, ensuring that people had proper nutrition for engaging in war: “The Nutrition needs of a healthy human body must be kept at par for defense work” (WJ Enright 1943).

- Nutritional guidelines set out during the war continued to effect American homes long after restrictions on meat and wheat consumption were lifted.

2. Wartime meatless days asked Americans to express patriotism for their country by forgoing the pleasures of meat. Modern Meatless Mondays asks citizens globally to make changes for the better of the planet and all people on it.

- Women were targeted as primary consumers.

- Students were targeted as influencing factor on parents’ consumption habits.

- Americans were urged to come together as a nation during a time of growing individualism in order to win the war.
Women were recruited to produce industrial food and to bring about reform in the home/kitchen.

Women urged to “use their power patriotically.”

Individuals and organizations took up the messages of early meatless days. Modern Meatless Mondays are championed in similar ways by organizations and individuals alike.

First Lady Edith Wilson grazed sheep on the White House lawn.

First Lady Eleanor Roosevelt planted the first White House Victory garden.

First Lady Michelle Obama had a White House vegetable garden focused on child nutrition and public schools.

Celebrity writers and chefs such as Michael Pollan and Tom Colicchio use their influence to promote the movement.

Early meatless days communicated the movement through posters, newspapers, and radio. Modern Meatless Monday spreads messages through social media in formats not unlike early meatless days.

World War I sees the first widespread use of propaganda posters by US government.

The movement to provide food aid in World War I was “the first large scale social networking enterprise of the twentieth century.”

Households were asked to sign food pledges.

Women’s organizations formed divisions to share information among housewives.

The Committee on Public Information consisted of ad men, writers, and artists dedicated to selling the idea of meatless and wheatless days. Ideals of sacrifice were highlighted—the blood sacrifice of soldiers was linked to sacrifice of bread on the home front.

Good Housekeeping and Ladies Home Journal articles were influential.

Five-Minute Men gave short speeches to large crowds about conservation, and educators during World War II gave speeches in bomb shelters during air raids.

President Roosevelt gave speeches such as his “Conservation as a National Duty” speech that urged Americans to take up the cause as a patriotic duty.
Appendix 2

Wartime Meatless Days Timeline

**World War One**

**April 1917:** US enters World War I, increasing the demand for meat and other staples.

**August 1917:** The US Food Administration is formed and funded by Congress. Herbert Hoover is elected as director.

**September 14, 1917:** State Senator Magnus Swenson introduces Meatless Tuesdays in Wisconsin.

**September 18, 1917:** First Meatless Tuesday observed in Wisconsin.

**October 4, 1917:** Herbert Hoover announces national Meatless Tuesdays.

**October 30, 1917:** First Meatless Tuesday observed nationwide.

**January 1918:** Western states have meatless day hiatus to use surplus caused by transportation shortage.

**April 1918:** Hoover calls for 30-day stay from Meatless days to use surplus, not observed for the rest of the war.

**World War Two**

**September 2, 1942:** Fifty-two government cafeterias in Washington, DC, have meatless and fishless Wednesdays, as suggested by Roosevelt.

**January 1943:** Officials call for household meat consumption reduction from 137 to 91 pounds annually.

**March 29, 1943:** Government institutes rations on meat, fats, and cheese.

**January 22, 1945:** Mayor LaGuardia orders two meatless days per week in New York City.

**July 23, 1945:** Las Vegas Restaurant Association voluntarily announces meatless Mondays and Tuesdays.
Endnotes

1. MEATLESS AND FLOURLESS DAY The Christian Science Monitor (1908-Current file); May 14, 1917; ProQuest Historical Newspapers: The Christian Science Monitor pg. 2


4. PATRIOT? SHUN MEAT TOMORROW: Hotels and Restaurants to Aid Government; Citizens May. Chicago Daily Tribune (1872-1922); Oct 29, 1917; ProQuest Historical Newspapers: Chicago Tribune pg. 1

5. “Beefless Tuesday” to Be Observed By Country’s Restaurant Keepers; ... The Washington Post (1877-1922); Aug 2, 1917; ProQuest Historical Newspapers: The Washington Post pg. 2


7. 57 RESTAURANT MEN MUST CLOSE ONE DAY: Punished by Food Administrator ... New York Times (1857-1922); Mar 10, 1918; ProQuest Historical Newspapers: The New York Times pg. 10

8. WEST TO REDUCE MEAT SURPLUS: Food Administration Promises to Raise ... Special to The Christian Science Monitor from its Western Bureau The Christian Science Monitor (1908-Current file); Jan 16, 1918; ProQuest Historical Newspapers: The Christian Science Monitor pg. 5

9. 25 PER CENT SAVED BY MEATLESS DAYS: Armour Reports Plan Enabled It to Care for Army Needs. The Washington Post (1877-1922); Jan 24, 1918; ProQuest Historical Newspapers: The Washington Post pg. 5


11. Food-Saving “Twaddle” Useless As Prices Soar, Asserts Writer FARRINGTON, CHARLES The Washington Post (1877-1922); Jul 15, 1917; ProQuest Historical Newspapers: The Washington Post pg. 23


15. Ibid 117

17. FOOD-SAVING PLAN FAILS.: Majestic Patrons Demand the More Expensive Dishes. New York Times (1857-1922); Aug 16, 1917; ProQuest Historical Newspapers: The New York Times pg. 1

18. PRESIDENT TALKS OF MEATLESS DAYS TO SAVE SHIPPING: He Estimates One a ... Special to THE NEW YORK TIMES. New York Times (1923-Current file); Aug 29, 1942; ProQuest Historical Newspapers: The New York Times pg. 1


27. Poultry was largely excluded due to high cost of chicken at the time. Most families could not afford chicken regularly and thus it was a negligible figure.


37. ibid 71

38. ibid 71