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Food Will Win the War: WWI and WWII Poster Propaganda and American Food Behaviors

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Declaration

I, Victoria Catherine Thomas, declare that this thesis is a result of my original research investigations and findings. All sources of information other than my own have been acknowledged and referenced. This work has not been previously submitted to any university other than the Norwegian University of Life Sciences (NMBU) for an award of any academic degree.

Victoria Catherine Thomas, December 2018

Signature:

Date:



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Abstract

This thesis provides a narrative history of the story told about food consumption, food waste, and food conservation through government sponsored posters during WWI and WWII. Throughout both world wars, the U.S. government pledged to provide food aid to war-torn Europe, requiring the U.S. government to manage agricultural resources, food production, distribution, and prices, and consumer food behaviors on an unprecedented scale. Thus, the U.S. government created poster campaigns in an attempt to alter American citizens' food behaviors. War posters encouraged reducing food waste on the home front by persuading consumers to produce, purchase, prepare, preserve, and conserve food for the war effort. Serving as representations of the times in which they were created, 44 posters were examined using thematic analysis, interactive image analysis, and propaganda analysis. By analyzing 21 WWI posters and 23 WWII posters, I identified six specific food behaviors which were targeted by the U.S. government: reducing consumption, using alternatives, canning food, not throwing food away, rationing, and recycling waste fats. A variety of methods were used to persuade consumers to conserve food including directing messages towards target audiences, such as women or soldiers, inspiring patriotism or guilt, and normalizing food conservation efforts. However, differences in WWI and WWII poster propaganda revealed the importance of context in influencing food behaviors. For instance, WWI food posters focused heavily on persuading Americans to consume less meat, wheat, and sugar, which was not needed in WWII, because government-mandated food rationing limited the consumption of these foods instead. While the context in which food conservation posters were created is one of the past, the messages about food and consumption hold valuable lessons for inspiring consumers to reduce food waste today. Therefore, this thesis is descriptive, serving as a foundation for further exploration and debate around shaping consumer food behaviors and the role poster propaganda played in using food to connect citizens to their own behaviors, the war effort, and their nation.

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Chapter 1: Introduction

Growing up in middle-class America, food was always plentiful and eating was always convenient. From fast food dinners to home cooked meals, I had the privilege to never go hungry, which also meant, I had never considered what life would be like without easy access to an abundance of food. Food was a cornerstone of my life, my identity, and my culture and yet, growing up, I knew very little about food production, food distribution, or food waste. My interest in food studies truly began when I had to dumpster dive in order to secure a proper nutrition. As a student living abroad, I could no longer afford to purchase enough food. In my search for alternative ways to feed myself, I discovered mass quantities of food, suitable for human consumption, sitting in grocery store dumpsters all around me. Even after I became financial stable years later, I continued dumpster diving; it seemed a shame for these perfectly edible foods to be on their way to rot in a landfill, when I was more than happy to take them home, give them a wash, and prepare delicious meals. This experience led me on a journey to better understand the phenomenon of food waste. Beginning as a personal necessity and curiosity, my journey quickly transformed into an environmental endeavor and life passion.

This thesis provides a narrative history of the story told about food consumption and food waste through government sponsored posters during WWI and WWII. During both world wars, the U.S. government created poster campaigns in an attempt to alter American citizen's food behaviors. WWI and WWII are particularly important for exploring food conservation efforts, because they were the two last constitutional wars the U.S. government entered. During a constitutional war the U.S. government and U.S. presidents are less restricted in how they can intervene in citizens' lives and in the approaches they can take to inform consumption.¹ While a democratic government should only present neutral information to the masses, during wartime, some persuasive communication is acceptable, as winning the war becomes the entire country's mission. Although the U.S. has been involved in multiple wars since the end of WWII, none of these were constitutionally declared, and no food conservation campaigns of this scale were created by the U.S. government again. While food waste was visible to consumers through WWI

¹ Mordecai Lee, *Promoting the War Effort: Robert Horton and Federal Propaganda 1938-1946* (Baton Rouge: Louisiana State University Press, 2012), 83.

and WWII food posters, after WWII, food waste faded from social and political conversations in the U.S. Thus, by analyzing WWI and WWII food posters, I hoped to illuminate a historical era in the food waste phenomenon.

This thesis uses exploratory research and historical research. The historical setting of this thesis presents opportunities to explore past phenomena using qualitative research. Qualitative methods were chosen to highlight the relevance of text, imagery, and context in promoting specific food behaviors during an era. This thesis is descriptive, serving as a foundation for further exploration and debate around shaping consumer food behaviors and the role poster propaganda played in using food to connect citizens to their own behaviors, the war effort, and their nation. In order to explore the U.S. government's use of poster propaganda in influencing American citizens' food behaviors during WWI and WWII, the following research questions were used: (i) What motivated the U.S. government to create food posters during WWI and WWII? (ii) Which food behaviors were targeted in WWI and WWII food posters and what methods were used to influence consumers? (iii) How might the targeted food behaviors create habits which result in less food waste during times of war and times of peace?

1.1. Food Waste around the Globe

Around one third of all food produced is lost or wasted globally,² roughly 1.3 billion tons annually.³ In 1981, the Food and Agriculture Organization (FAO) defined food waste as any “wholesome edible material intended for human consumption” which is “instead discarded, lost, degraded, or consumed by pests”.⁴ In 2010, the FAO expanded this definition to differentiate between two major categories of wasted food; food is considered lost at the production level, while food is considered wasted if it is not consumed at retail and consumer levels.⁵ Weather and variations in temperature or rainfall, pests, farm management choices, and soil infertility all contribute to food losses. Additionally, food may be lost by spoiling in transit and in storage, particularly in areas with high temperatures and humidity.⁶ In 2012 it was estimated that more than

² FAO, “Food Loss and Food Waste”, Accessed October 5, 2018 from <https://tinyurl.com/kthb5ws>.

³ Ludovica Principato, *Food Waste at Consumer Level* (Rome: Springer International Publishing, 2018) 9.

⁴ Julian Parfitt, et al., “Food Waste within Food Supply Chains: Quantification and Potential for Change to 2050”, *Phil. Trans. R. Soc. B*, 365. (2010), 3065.

⁵ Principato, *Food Waste at Consumer Level*, 2.

⁶ William Rathje and Carl Zimring, eds. *Encyclopedia of Consumption and Waste: The Social Science of Garbage* (Thousand Oaks, CA: Sage Publications, 2012), 271.

6 billion pounds of food were lost during production and of the products which arrived to stores, around 43 billion pounds were not consumed by humans. In developed nations, the household accounts for the highest quantity of food waste.⁷ Food waste accounts for 680 billion USD in industrialized nations, while costing roughly 310 billion USD in developing nations.⁸

Meanwhile, the FAO estimated, from 2012 to 2014, that 795 million people lack access to sufficient food and suffer from chronic malnourishment.⁹ Global food security targets demand that more food is produced in the coming years in order to feed those that suffer from hunger. However, enough food is already produced to feed the 7.3 billion people alive today.¹⁰ This paradigm highlights inequitable food distribution around the globe. Food waste is highest in developed countries where food is typically abundant, while malnourishment is more common in developing countries which more often experience food scarcity. Even within developed countries, food may be abundant while individuals in that same country cannot access sufficient food. Thus, food insecurity and food waste exist concurrently around the world, exposing fundamental problems within the global food system. Producing food just to be wasted, not only damages food security, but also creates negative ecological consequences.

Food waste is an inefficient use of natural resources and has been targeted as a contributor to climate change. Before food can be eaten or discarded, food must first be produced and travel through a complex global food system to be purchased by an individual. Large quantities of natural resources such as fresh water, energy, fertilizer, and vast amounts of land are required to produce food.¹¹ Thus, increasing food production poses environmental risks to the land, soil, water, and air.¹² Agriculture is the largest cause of deforestation and consumes nearly 92 percent of the world's fresh water each year.¹³ Additionally, food production contributes to water pollution, soil

⁷ Marco Setti, et al., "Consumers' Food Cycle and Household Waste. When Behaviors Matter", *Journal of Cleaner Production*, 185. (2018), 694.

⁸ FAO, "SAVE FOOD: Global Initiative on Food Loss and Waste Reduction", Accessed November 11, 2018 from <http://www.fao.org/save-food/resources/keyfindings/en/>.

⁹ Sugam Sharma, et al., "eFeed-Hungers: Reducing Food Waste and Hunger Using ICT", *Resources, Conservation and Recycling*, 131. (2018), 99.

¹⁰ Beate Richter and Wolfgang Bokelmann, "The Significance of Avoiding Household Food Waste: A means-end-chain approach", *Waste Management*, 74. (2018), 34.

¹¹ Ibid.

¹² Krista Thyberg and David Tonjes, "Drivers of Food Waste and Their Implications for Sustainable Policy Development", *Resources, Conservation and Recycling*, 106. (2016), 111.

¹³ Winnie Gerbens-Leenes, Mesfin Mekonnen, and Arjen Hoekstra, "The Water Footprint of Poultry, Pork and Beef: A Comparative Study in Different Countries and Production Systems", *Water Resources and Industry*, 1, no.2. (2013), 26.

erosion and nutrient depletion, and greenhouse gas emissions. After production, food is often transported hundreds to thousands of miles to reach the consumer, using large quantities of fossil fuels. When food is wasted, the water, energy, and nutrients used to produce and transport these products are wasted needlessly. Food waste often ends up untreated in landfills, where piles of organic matter decompose. As food waste decomposes, methane is emitted into the air. Methane is a potent greenhouse gas, which has a greater climate warming potential than carbon dioxide.¹⁴ Therefore, food waste decomposing in landfills must be reduced, as part of the effort to mitigate climate change.

Over the past few decades, food waste has become its own branch of study, as researchers, politicians, and activists strive to combat global hunger and mitigate climate change. As the food waste phenomenon has become more visible, solutions to more efficiently manage food waste have been proposed. Food waste can be diverted from landfills by separating wasted foods from other waste types. Once separated, food waste may be composted and recycled into nutrient-rich soils, or collected as organic matter and burned on large scales to create energy.¹⁵ Managing waste more efficiently reduces the environmental consequences of food waste decomposing in landfills. Yet, these solutions do not redistribute food to those suffering from hunger. Therefore, another solution to more efficiently manage food waste is through food recovery. Food donation programs, such as food banks, food pantries, and shelter feeding programs redistribute donated foods to those in need. However, food donation programs have been criticized as being a band-aid fix and not addressing the root causes of malnourishment. Food banks have also faced challenges because canned goods and processed foods are predominantly donated, rather than fresh produce, offering less nutritious meals to the recipients. Additionally, these diversion and recovery programs do not address food production's ecological consequences. Thus, waste management alone is not a sustainable solution, but instead, prevention is needed.

Many European countries have taken steps to reduce food waste through both national policy and non-governmental programs. In 2016, France took an unprecedented step towards preventing food waste, by passing legislation which makes it illegal for supermarkets to throw

¹⁴ Mehmet Melikoglu, Carol Ki Lin and Colin Webb, "Analysing Global Food Waste Problem: Pinpointing the Facts and Estimating the Energy Content", *Central European Journal of Engineering*, 3, no.2. (2013), 160.

¹⁵ Melikoglu, et al., "Analysing Global Food Waste Problem", 159.

away foods which are still suitable for human consumption.¹⁶ While large food retailers must donate unused foods or pay fines, this legislation also requires food sustainability education for children, requires companies to report food waste statistics, and requires restaurants to provide bags for take-away.¹⁷ All of these requirements normalize preventing and reducing waste. While France's government took a leap in nationwide food policy, more non-governmental programs are being initiated, asking individuals to reduce food waste from their households. In the UK, the Waste and Resources Actions Program (WRAP) created the Love Food Hate Waste campaign (LFHW). LFHW raises food waste awareness among British citizens and provides practical advice to reduce food waste.¹⁸ WRAP also provides tools for those who wish to create their own waste campaigns. Programs such as LFHW place more responsibility on the individual to waste less food. Such initiatives are becoming more common around Europe, as an increasing number of individuals are engaged in reducing food waste in the twenty-first century.

1.2. Food Waste in the U.S.

America's relationship with food has changed drastically over the past century. In the beginning of the twentieth century, American agriculture was dominated by small, labor-intensive farms employing roughly half the population to produce an average of five different commodities. Agriculture has since shifted to fewer, much larger farms, producing a smaller variety of goods. Between 1900 and 2005 the number of American farms fell by 63 percent as technological advancements changed food production drastically.¹⁹ Tractors and machinery reduced the need for manual labor, and fewer families produced food. As food production changed, so did food consumption. Throughout the 1910's, the self-service grocery store became a common and widespread middle man between the farm and the consumer.²⁰ Small locally-owned, specialty food shops and food markets were replaced by larger, chain grocery stores. Chain grocery stores offered sales on foods which could all be purchased in one place, making shopping cheaper and more

¹⁶ Angelique Chrisafis, "French Law Forbids Food Waste by Supermarkets," *The Guardian*, February 4, 2016, <https://www.theguardian.com/world/2016/feb/04/french-law-forbids-food-waste-by-supermarkets>.

¹⁷ Marie Mourad, "France Moves Towards a National Policy Against Food Waste", NRDC (2015), <https://www.nrdc.org/sites/default/files/france-food-waste-policy-report.pdf>.

¹⁸ WRAP, "Love Food Hate Waste", (2018) <http://www.wrap.org.uk/content/love-food-hate-waste>.

¹⁹ Carolyn Dimitri, Anne Effland, and Neilson Conklin, *The 20th Century Transformation of U.S. Agriculture and Farm Policy*, Economic Information Bulletin no. 3, Washington D.C.: Economic Research Service (2005), 2.

²⁰ Tracey Deutsch, *Building a Housewife's Paradise: Gender, Politics, and American Grocery Stores in the Twentieth Century* (Chapel Hill, NC: University of North Carolina Press, 2010).

convenient. Additionally, advancements in food processing and packaging led to grocery store shelves packed with cheaper, longer-lasting, and more processed foods.²¹

Many of these technological advancements occurred during WWI and WWII through military-funded research and development. The world wars also played a large role in constructing people's relationships with food. Fearing food scarcity, people returned to the soil and urban gardening sprouted up across the nation, as nearly 20 million victory gardens were created.²² Victory gardens provided Americans with an additional food source and brought food production back into the gardens and community plots of towns and cities in the U.S. Additionally, war propaganda was widespread during WWI and WWII, through which food conservation became a cornerstone of the war effort. During both world wars, the U.S. government took action by creating food conservation campaigns, asking Americans' to alter their consumption habits and to reduce food waste, ultimately making food waste visible among consumers. However, during and after WWII, advances in agriculture and chemical fertilizers increased crop yields and offered the U.S. the opportunity to produce more food than ever before. Thus, food became cheaper and food scarcity in the 1930's and 1940's shifted into abundance.

Today, the U.S. leads the world in food waste. In the U.S. alone, 40 percent of food is wasted annually, while nearly 40 million people go hungry across the nation. Roughly 77 billion pounds of edible food are thrown away from restaurants, convenience stores, and supermarkets and household food waste accounts for nearly 14 percent of all municipal solid waste in American landfills.²³ In 2012, one in six Americans lacked access to enough food to sustain a healthy diet, while on average American consumers are wasting 50 percent more food than in the 1970's.²⁴ The unequal access to nutritious foods and the growing amount of food wasted in households across the U.S. reveals a deeply disturbing relationship between food distribution, consumption, and responsibility.

Therefore, various agencies within the U.S. federal government have targeted food waste as a national challenge requiring solutions. In 2013, the United States Environmental Protection

²¹ Amy Bentley and Hi'ilei Hobart, "Food in Recent U.S. History" in *Food in Time and Place: The American Historical Association Companion to Food History* (Oakland, CA: University of California Press, 2014), 166.

²² Lizzie Collingham, *The Taste of War* (New York City, NY: The Penguin Group, 2011), 418.

²³ Melikoglu, et al., "Analysing Global Food Waste Problem", 158.

²⁴ Dana Gunders, "Wasted: How America is Losing up to 40 Percent of its Food from Farm to Fork to Landfill". (*NRDC Issue Paper*, 2012) <https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf>.

Agency (EPA) and the United States Department of Agriculture (USDA) launched the Food Waste Challenge, asking both private and public groups to reduce food waste.²⁵ By 2014, over 4000 parties had joined the Food Waste Challenge, making commitments to reduce, recover, and recycle food waste. Continuing this effort, in 2015, the EPA and the USDA announced the food waste and reduction goal to cut food waste levels in half by 2030.²⁶ To incentivize organizations to participate, in 2016, the USDA and the EPA offered the title “U.S. Food Loss and Waste Champion” to businesses who made a public commitment to the 2030 goal. Since 2016, 23 organizations have been named as food loss and waste champions.²⁷ The EPA created a food recovery hierarchy, which highlights the most preferred and the least preferred activities to recover food including: source reduction, feeding hungry people, feeding animals, industrial uses, and the last resort, landfill or incineration.²⁸ These initiatives bring food waste issues to the forefront and ask for a shift in thinking about food waste across the nation. While these federally supported programs ask businesses and organizations to reduce food waste, an estimated 31 percent of food is wasted through retailers and households.²⁹ American households are responsible for roughly 20 percent of the total amount of food wasted each year.³⁰ Preventing consumer-level food waste is exceedingly challenging because individuals’ food behaviors are a complex blend of personal, social or cultural, and financial choices.

1.3. Food Behaviors

Everyone must eat, and therefore, every day individuals must make choices about food. These daily choices are made through food behaviors, or the actions an individual takes or does not take in managing their diet. Food behaviors include the actions taken to plan, shop, prepare, cook, store, and dispose of food. While eating is necessary to sustain life, eating is also a cultural or emotional experience, and therefore, food behaviors are not always rational. Instead, food behaviors are influenced by both internal and external factors. Internal factors include the

²⁵ USDA, “USDA and EPA Launch U.S. Food Waste Challenge”, Accessed November 17, 2018 from <https://tinyurl.com/yaetab4d>.

²⁶ USDA, “Food Loss and Waste”, Accessed November 17, 2018 from <https://www.usda.gov/foodlossandwaste>.

²⁷ EPA, “Sustainable Management of Food”, Accessed November 17, 2018 from <https://tinyurl.com/y8jjo8qj>

²⁸ Zhengxia Dou, et al., “Assessing U.S. food wastage and opportunities for reduction”, *Global Food Security*, 8. (2016), 21.

²⁹ Principato, *Food Waste at Consumer Level*, 5.

³⁰ Zach Conrad, et al., “Relationship Between Food Waste, Diet Quality, and Environmental Sustainability”, *Plos One*, <https://doi.org/10.1371/journal.pone.0195405>, (2018), 2.

knowledge or skills in how to shop, cook, and store foods, as well as personal preferences or values. An individual's upbringing may result in continuing certain behaviors over others, such as being raised to eat everything on the plate versus being raised in households where leftovers were not commonly consumed.³¹ Individuals' food behaviors are also influenced by external factors, such as how a product is packaged or labeled, marketing, and price. These examples are not exhaustive, but represent a variety of influences on food behaviors.

Food behaviors are often habitual, developing unconsciously. Habitual behaviors develop based on how often an action has occurred in the past and the stability of the situational context in which this behavior is performed.³² When an individual is in the same situational context, their behaviors become automatic responses to their environment. Individuals engage in waste behaviors at a high frequency, usually in their home. Therefore, if an individual does not spend much time considering how much food waste is being created, their food habits may lead to wastefulness out of unconscious habit. For many, very little prior or conscious thought is given to whether or not food will be wasted as a result of their food behaviors. Additionally, the process of wasting food is largely invisible, hidden in plastic containers and trash cans, and then waste is swiftly removed from an individual's life. Therefore, individuals tend to underestimate the amount of food which they waste.³³

Food is mainly wasted by consumers due to "spoilage, leftovers on plates, foods officially outdated for consumption, shorter shelf life of fresh foods and forgotten food in the fridge".³⁴ Additionally, an underdeveloped connection between individuals and food and poor food management also contribute to high food waste levels in households.³⁵ Food waste does not occur because of one behavior, but rather, food waste occurs as the result of multiple behaviors. Having an overview of food items already in the home, planning meals in advance, portioning meals to appropriate sizes, storing food properly, and using leftovers all lead to reduced food waste.

While many studies found participants likely to consider wasting food as inherently wrong, other factors play a larger role in the actual amount of food wasted. First, individuals are most

³¹ Cassandra Nikolaus, Sharon Nikols-Richardson and Brenna Ellison, "Wasted food: A Qualitative Study of Young Adults' Perceptions, Beliefs and Behaviors", *Appetite*, 130. (2018), 75.

³² Tim Jurz, et al., "Habitual Behaviors or Patterns of Practice? Explaining and Changing Repetitive Climate-relevant Actions". *WIREs Clim Change*, 6. (2015): 117.

³³ *Ibid*, 72.

³⁴ Richter and Bokelmann, "The Significance of Avoiding Household Food Waste", 35.

³⁵ Nikolaus, et al., "Wasted food".

likely to make food choices based on income. To ensure food security, individuals may purchase food in bulk or be more likely to take advantage of in-store sales. However, these choices are more likely to result in food spoiling before it can be consumed or food being forgotten in the back of cupboards, because purchasing these items was not planned. Next, a lack of knowledge surrounding food planning, preparation, storage, and disposal contributes to food waste. Knowledge encompasses a wide scope of behaviors from relying on expiration dates to understanding appropriate portion sizes. Romani et al. found failure to plan for food preparation to be the largest barrier to reducing household food waste.³⁶ Food is more likely to be wasted when an individual is pressed for time, because reducing food waste requires proper planning, such as checking what is available in the house before shopping, making a list, planning meals, and storing food properly.

Social norms, or the informal rules understood within a culture, also play a role in determining food waste levels. College students in a study by Nikolaus, Nickols-Richardson, and Ellison reported that “saving food was not valued in American society”, but instead, American culture is one of waste, where wasting food is normal.³⁷ Yet, individuals may waste less food if they perceive that their peers or important people in their lives believe wasting food is wrong.³⁸ Therefore, social pressure could play a role in shifting social norms towards waste reduction and normalizing thoughtfulness surrounding food waste. In the U.S., there is little social pressure to reduce food waste. Instead, most consumers have the freedom to choose from the most varied and abundant foods.³⁹ Additionally, the abundance of food available to those who are financially secure may result in excessive food waste, because there is always more right around the corner. Therefore, the idea of food conservation may be foreign to many individuals, who have seldom had to consider their food behaviors.

Interestingly, studying food waste behaviors has revealed generational differences in the amount of food wasted.⁴⁰ Not only do individuals older than 65 waste less food than younger

³⁶ Simona Romani, et al. “Domestic Food Practices: A Study of Food Management Behaviors and the Role of Food Preparation Planning in Reducing Waste”, *Appetite*, 121. (2018), 220-221.

³⁷ Nikolaus, et al., “Wasted food”, 75.

³⁸ Principato, *Food Waste at Consumer Level*, 18.

³⁹ Melikoglu, et al., “Analysing Global Food Waste Problem”, 158.

⁴⁰ Richter and Bokelmann, “The Significance of Avoiding Household Food Waste”, 35; Quested, et al., “Spaghetti Soup: The Complex World of Food Behaviours”, *Resources, Conservation and Recycling*, 79. (2013), 47.

generations,⁴¹ but also, being young was specifically listed as a factor which increased food waste levels.⁴² Individuals between 16 and 24 years old were found to waste twice as much food as individuals over 65.⁴³ While older generations were found to waste less food, those over 65 were simultaneously much less concerned with the natural environment than younger generations. Instead, it was determined that older generations held the attitude that wasting food, and wasting in general, was inherently wrong and their habitual behaviors eliminated unnecessary food waste. Quested et al. hypothesize that generational differences could stem from food scarcity, food rationing, and food management education around the Second World War.⁴⁴ Growing up in a different context may have influenced the habitual food behaviors which those over 65 still practice today. If living through WWII left a lasting impression on individuals' food behaviors, exploring how citizens were asked to behave may reveal potential methods to inform individuals' food behaviors today.

1.4. Why Posters?

The poster has been an important medium for spreading information throughout history. Before the poster, the most prominent method for communicating to crowds was through criers, who would loudly announce news, commercial products, and public messages.⁴⁵ In the late 1700's, criers were rapidly replaced by posters, handbills, and broadsides which displayed these messages in public spaces physically rather than orally.⁴⁶ The poster was more efficient for communicating to the masses, increasingly settling in cities. Before newspaper advertising and magazines, the poster was the first media to use text, imagery, and after the mid 1800's, color.⁴⁷ At the pinnacle of poster use, artists expressed their political and social critiques, advertised merchandise or services, and spread news through the poster medium. Poster designs changed as quickly and as often as technological advancements and political or social culture shifted.⁴⁸ Therefore, the poster represents the intersection of art, advertising, and urban culture. As opposed to the fine arts, the

⁴¹ Quested, et al., "Spaghetti Soup", 47.

⁴² Nikolaus, et al., "Wasted food", 70-71.; Romani et al. "Domestic Food Practices", 216.

⁴³ Principato, *Food Waste at Consumer Level*, 16.

⁴⁴ Quested, et al., "Spaghetti Soup", 47.

⁴⁵ Ruth Iskin, *The Poster: Art, Advertising, Design, and Collecting, 1860s-1900s* (Dartmouth: University Press of New England, 2014), 215.

⁴⁶ Terrence Witkowski, "World War II Poster Campaigns: Preaching Frugality to American Consumers", *Journal of Advertising*, 32, no.1. (2003).

⁴⁷ *Ibid*, 70.

⁴⁸ Ruth Iskin, *The Poster*, 174-175.

poster was created for the street, which required new approaches to communication. Glued or tacked onto fences, brick walls, or shop windows, posters would only be successful if their messages stood out against the bustle of the urban environment. The poster's location on the street required messages which were quickly and easily consumed by the masses, becoming an essential vehicle for spreading war propaganda.

During WWI, the poster was a crucial tool for communicating to the masses, being both visually prominent and simple to mass produce. Artists and designers were hired to produce posters which would persuade Americans to join the war effort. War posters were created in varying sizes and hung throughout towns and cities. Large banner posters were hung on municipal buildings and small placards were placed in windows, showcasing that a house, a shop, or an organization was supporting the war effort. Thus, during WWI the poster was a cornerstone for mobilizing the nation. While posters were mass produced and widespread during WWII as well, the poster was no longer the predominant method for spreading war messages. Although a larger quantity of posters were printed during WWII, television, film, and radio were also used to communicate war messages.⁴⁹ However, the poster continued to play an important role in WWII as the field of advertising began to transform the poster for both the war effort and for marketing purposes. War posters remain popular today for their artistic aesthetic and continue to be the subject of museum exhibits and books.⁵⁰ The poster has since been examined as a piece of data, across a variety of fields and academic disciplines, including public relations, history, and art history.⁵¹

American citizens living through WWI and WWII were surrounded by poster propaganda praising thrift, responsibility towards resources, and sacrifice. War posters encouraged reducing food waste on the home front by persuading consumers to produce, purchase, prepare, preserve, and conserve food for the war effort. Today, these war posters exist in archives unedited, offering the potential to investigate their creation, their use, and their intended messages, frozen in the difficult times of global war. Serving as representations of the times in which they were created, government sponsored posters reveal what the government needed to communicate with the masses and how the government attempted to influence consumer food behaviors.

⁴⁹ William Bird and Harry Rubenstein, *Design for Victory: World War II Posters on the American Home Front* (New York: Princeton Architectural Press, 1998), 11.

⁵⁰ Witkowski, "World War II Poster Campaigns", 70.

⁵¹ Iskin, *The Poster*.

1.5. Selecting and Analyzing Posters

The war posters used for this study were selected from online archives. The selected posters were published by the U.S. government and therefore, are free of copyright restrictions. After a preliminary search for archives, posters, and literature, I began documenting which WWI and WWII posters were related to food and food behaviors. Unfortunately, there are limited statistics on the number of posters dedicated to each of the many topics communicated through war posters. Therefore, I began my search by selecting every poster which was related to a food item or food behavior in three online archives. Beginning with the Northwestern University Library archive,⁵² 24 out of 405 WWII posters were related to food behaviors. Secondly, the National Archives Catalog had 2,829 posters or images in various war categories.⁵³ Using keywords, such as poster, food, conservation, and resources to narrow the search, 30 WWI posters and 40 WWII posters related to food behaviors were chosen. Lastly, the Library of Congress Online had two out of 17 posters related to food behaviors.⁵⁴ A total of 96 posters were selected for initial review.

These posters were chosen purposively, specifically to relate to my research questions.⁵⁵ The goal of this thesis is not to generalize a phenomenon against an entire population but to explore why and how war posters communicated messages about food and food behaviors. Therefore, posters were selected which demonstrated a variety of messages and methods for spreading information or persuading consumers to alter their food behaviors. Additionally, posters which appear repeatedly in books and on the internet were taken into consideration. Their popularity as representations of the war effort was considered relevant, whether based on their visual appeal as art or as to the impact of their message.

While qualitative research uses a wide-range of analysis methods, the poster required specific methodological considerations as a piece of multimodal data, integrating both text and imagery.⁵⁶ Thematic analysis was used as a primary analysis tool to identify specific actions which would reduce food waste on the American home front. Each poster's text was reviewed to identify the written and explicit messages. The 96 posters were then grouped into themes based on similar keywords such as types of foods and verb phrases. Verb phrases included additional descriptive

⁵² Northwestern University Library Archive, <https://images.northwestern.edu/>.

⁵³ National Archives Catalog, <https://www.archives.gov/research/catalog>.

⁵⁴ Library of Congress Online, <https://www.loc.gov/>.

⁵⁵ Alan Bryman, *Social Research Methods*, 4th ed. (Oxford: Oxford University Press, 2012), 418.

⁵⁶ *Ibid.*

words or modifiers attached to the verbs, such as ‘eat less’ or ‘cook carefully’. From these primary groupings, six specific food behaviors were identified: reducing consumption, using alternatives, canning food, not throwing food away, food rationing, and recycling waste fats.

However, thematic analysis is not a complete methodology when used alone.⁵⁷ Therefore, interactive image analysis was used as well. The poster’s power as a communication tool lies beyond the explicit, written text. Thus, interactive image analysis was used to identify potential methods for communicating messages using visual tools, rather than only using text and direct commands. Interactive image analysis is supported by the idea that images “do not exist in a vacuum but instead entail an audience upon whom they exert effects”.⁵⁸ Therefore, each poster was analyzed as an active effort to communicate rather than a passive or static image. Three elements were highlighted within each poster to reveal how the images attempt persuasion or portray emotions. First, sensory elements were identified including color, lighting, and texture. Next, structural elements were identified including axes, perspective, and depth. Lastly, dynamic and emerging elements were identified including orientation of figures, gaze, directionality, and focal points.⁵⁹ These characteristics were noted in excel spreadsheets and were used to create final notes about each individual poster. The use of interactive image analysis was not exhaustive of all possible elements within each poster, but instead offered a starting point for more detailed, in-depth analysis of the poster’s composition. By focusing on these three elements, I was able to better grasp how the contents of each image played a role in the potential viewer’s understanding of the poster, and which methods were used repeatedly across my poster sample.

Additionally, the primary data source for this thesis was the war poster, which required an understanding of propaganda analysis. Jowett and O’Donnell outline a 10-step plan for analyzing propaganda in their book *Propaganda and Persuasion*.⁶⁰ However, the 10-step plan was less useful as a complete analytical tool for answering my research questions, and included specific analytical divisions which would either be too time consuming for the duration of this thesis or would be impossible based on the lack of documentation of many war posters’ origins and authors. Therefore, Jowett and O’Donnell’s chapter was used as a basis for better understanding the

⁵⁷ Ibid, 578.

⁵⁸ Derek Hook and Vlad Glaveanu, “Image Analysis: An Interactive Approach to Compositional Elements”, *Qualitative Research in Psychology*, 10, no.4. (2013), 356.

⁵⁹ Ibid, 360.

⁶⁰ Garth Jowett and Victoria O’Donnell, “How to Analyze Propaganda” in *Propaganda and Persuasion*, (Thousand Oaks, CA: Sage Publications, 2005).

requirements for analyzing propaganda as a subject different than art or traditional text and discourse. Jowett and O'Donnell stress the importance of the context in which the propaganda occurs, the role of the propagandist, and the target audience, which were all considered in the analysis of these war posters.⁶¹ Additionally, the historical context in which these posters were created and deployed is fundamental to analyzing and understanding the intended messages within the posters, be they explicit or implicit.⁶² Therefore, particular importance was given to the context in which the war posters were created to identify why particular food items and habits were targeted by the government during WWI and WWII.

From the 96 initially selected posters, 44 posters were chosen to be presented in this thesis to highlight a variety of methods in targeting specific food behaviors. Each poster's title and targeted food behavior is listed in Table 1, a full description of each poster's text can be found in Appendix A, and each poster image can be found in Appendix B. Chapters three and four are organized under four subheadings each, which highlight the context in which these posters were created and how food conservation was presented to the American public. Chapters three and four are not organized by specific food behaviors, as some posters suggest multiple food behaviors concurrently. However, the dominant food behavior communicated through text and imagery was chosen to categorize each poster and to gain an overview of which food habits were targeted. Seven posters do not represent one of the six food behaviors but were used to support the analysis of this thesis. These seven posters fall more generally under the food conservation theme, which guided the original poster selection process, and are labeled with a star in Table 1.

It is necessary to specify that my understanding of the images and messages in WWI and WWII poster campaigns will not represent how the viewers of these images understood or consumed them at their time of use. This research is based only on the posters and secondary information about early and mid-twentieth century America. My location in time and space allowed me only to observe the past from my present perspective and my own context. Therefore, throughout the data collection and analysis process, consideration was given to any potential personal preferences and how my understanding of history could affect the presentation of my findings.

⁶¹ Ibid, 270.

⁶² Bird and Rubenstein, *Design for Victory*, 3.

Additionally, my research does not attempt to measure the impact these posters had on consumers during wartime. War posters were mass produced, distributed unevenly across the country, and aimed at specific socio-demographic classes and ethnicities over others. Instead, this research focused on the government's role in creating messages about consumption practices and food behaviors. By analyzing the messages within the posters and using historical accounts to better understand the context in which the posters were created, my focus always returned to the U.S. government's motivation for creating specific messages. Understanding these posters requires better understanding the era in which they were created, and therefore, I present the historical background in chapter 2.

Table 1: WWI and WWII Poster Titles and Identified Food Behaviors

WWI		
Poster Number	Poster Name	Food Behavior
01	Keep the Wolf From Our Own Door	Reduce consumption
02	Be Patriotic	*
03	The Greatest Crime in Christendom	Do not throw away
04	An Heroic Sacrifice	Reduce consumption of sugar
05	Sir-Don't Waste While Your Wife Saves	Do not throw away
06	Food Will Win the War	Reduce consumption of wheat
07	Save a Loaf a Week	Reduce consumption of wheat
08	Patriots	Use alternatives
09	Sugar Means Ships	Reduce consumption of sugar
10	Eat Cane Syrup & Molasses	Use Alternatives
11	Eat More Cottage Cheese	Use Alternatives
12	Save the Products of the Land	Use Alternatives
13	Blood or Bread	Do not throw away
14	Keep it Coming	Do not throw away
15	Don't Waste Food While Others Starve	Do not throw away
16	Save Food for World Relief	Do not throw away
17	Food is Ammunition-Don't Waste it	Do not throw away
18	Defeat the Kaiser and His U-boats	Reduce consumption of wheat
19	Win the Next War Now	Canning
20	300 Million Hungry People are Watching Your Plate	Do not throw away
21	Don't Let Up	*

World War II		
Poster Number	Poster Name	Food Behavior
22	A Fair Share For All of Us	Rationing
23	Plant A Victory Garden	Rationing
24	Do With Less-So They'll Have Enough	Rationing
25	Join the Ranks	Do not throw away
26	Sugar-Flour-Cereal-Spice	*
27	Milk and Eggs-Nature's Food	*
28	Fruit You Waste Here...	Do not throw away
29	We'll Have Lots to Eat This Winter, Won't We Mother?	Canning
30	Of Course I Can!	Canning
31	Can All You Can	Canning
32	You Were Right Sir!	Do not throw away
33	Thank You So Much American Soldier	Do not throw away
34	Valley Forge	Do not throw away
35	You Bite The Hand That Feeds You...	Do not throw away
36	Small Fry	Do not throw away
37	To Speed Our Boys Home	*
38	Food Is a Weapon	Do not throw away
39	Our Food is Fighting	*
40	Vital War Materials	Salvage food waste
41	Save Waste Fats for Explosives	Recycle waste fats
42	The Grease You Save...	Recycle waste fats
43	Save Fats	Recycle waste fats
44	A Message About Food From The President of the United States	*

Note: Posters are numbered based on the order they appear within chapters three and four.

* Posters do not portray one specific food behavior but were used to support the analysis of this thesis.

Chapter 2: Historical Background

“We are not makers of history; we are made by history”

-Martin Luther King, Jr., 1963

Also known as The Great War, WWI began in Europe in 1914, forever changing global relations. The American public was divided over the U.S.’s potential involvement in WWI and President Woodrow Wilson largely promised the American public neutrality. For just over two years, the U.S. government debated neutrality, the extent to which the U.S. should be prepared for war, and intervention.⁶³ However, in 1917, the U.S. officially entered WWI and fought alongside the Allied forces including Great Britain, France, Russia, and Italy. While the government declared war in 1917, American public opinion was not necessarily on board with the declaration of war. Therefore, the U.S. government needed to influence public opinion and justify entering WWI, sparking mass produced propaganda campaigns.

Persuading masses through propaganda was first documented in the 1600’s.⁶⁴ Yet, during WWI propaganda become organized and implemented on a massive scale for the first time. Technological advancements such as the radio and printing press were becoming more convenient, facilitating the spread of propaganda. Only a week after declaring war, President Wilson established the Committee on Public Information (CPI). Led by George Creel, the CPI was given 5 million USD “to harness and manage... patriotism”.⁶⁵ The CPI’s purpose was to unify the American public and mobilize the American people. From posters and newspapers to brochures and buttons, the CPI’s Division of Pictorial Publicity organized and distributed information to the American masses, on behalf of the Wilson Administration. The CPI created around 1500 poster designs while in commission.⁶⁶ For the first time in American history, there was a powerful, single entity responsible for shaping public opinion and convincing American citizens WWI was their war to fight.

⁶³Jonathan Auerbach, *Weapons of Democracy: Propaganda, Progressivism, and American Public Opinion* (Baltimore: John Hopkins University Press, 2015), 49.

⁶⁴ Nancy Snow, *Propaganda and American Democracy* (Baton Rouge: Louisiana State University Press, 2014), 10.

⁶⁵ Auerbach, *Weapons of Democracy*, 69.

⁶⁶ Tanfer Tunc, “Less Sugar, More Warships: Food as American Propaganda in the First World War”, *War in History* 19, no.2. (2012), 197.

The U.S. government created war posters to foster support for the war, boost citizen morale, and promote men and women to enlist in the armed forces or war jobs, respectively. Additionally, conserving resources, particularly food, played a large role in wartime America. Food scarcity in Europe forced combatant nations to control food prices and enforce rationing. However, the U.S. was in a unique position, situated across the Atlantic Ocean from most battlefronts, with more abundant agricultural resources than war-torn Europe. Therefore, the U.S. pledged to feed, not only American citizens and soldiers, but also Allied troops and European citizens suffering from starvation. The U.S. government needed to reduce and alter consumption on the home front. Thus, President Wilson appointed Herbert Hoover to direct the United States Food Administration (USFA) in August 1917.⁶⁷ Throughout WWI, the USFA worked to control the production, price and distribution, consumption, and conservation of food. The USFA asked the American public to alter their diets because canned-goods, packaged foods, and staple items, such as wheat and meat, had to be redistributed overseas to feed soldiers and European citizens. While the USFA would continue asking citizens to conserve food, supporting Europe with food aid until 1919, the CPI largely stopped its domestic activities in November 1918 as WWI ended.

President Wilson abolished the CPI in 1919. The CPI was overwhelmingly effective in mobilizing the nation throughout WWI. According to Tunc, “American food consumption declined by 15 percent”.⁶⁸ Thus, when the U.S. entered the roaring twenties, the average citizen had been asked to sacrifice by the Wilson administration, the CPI, and the USFA for roughly three years. However, food was no longer a targeted resource after the USFA was dissolved by President Wilson in 1920. Meanwhile, food processing technology improved dramatically as war technologies advanced. Therefore, after the war, processed foods became more common; potatoes were out, and soft drinks were in.

During WWI, farmers has been asked to grow more wheat or corn, and planted vast areas of row crops. After WWI, wheat prices plummeted and farmers attempted to grow bumper crops in order to break even financially. Unfortunately, the Midwest experienced extreme drought and inhospitable agricultural conditions throughout the 1930’s.⁶⁹ Also known as the Dust Bowl,

⁶⁷ Celia Kingsbury, *For Home and Country: World War I Propaganda on the Home Front* (Lincoln: University of Nebraska Press, 2010), 27.

⁶⁸ Tunc, “Less Sugar, More Warships”, 214.

⁶⁹ Dorian Burnette and David Stahle, “Historical Perspective on the Dust Bowl Drought in the Central United States”, *Climatic Change*, 116, no.3-4. (2013), 480.

disastrous drought and some of the hottest summer temperatures recorded caused severe dust storms to spread from Texas to Nebraska, resulting in an infamous environmental disaster. Around the same time, meeting basic needs became a daily challenge for many, after the financial crisis hit in October 1929. During what became known as the Great Depression, unemployment was the highest in 1933 and hunger was commonplace among middle and lower class American families.⁷⁰ During these difficult years, economic and agricultural hardships forced consumers to purchase less, and therefore, use food more sustainably. Casseroles and loaves became common meals, as an alternative to wasting food scraps. While rain returned to the Midwest and southern great plain regions in 1939, the economic repercussions remained. Not until WWII would war industries boom, pulling the U.S. out of the Great Depression and putting American citizens back to work.⁷¹

September 1939 marks the start of WWII in Europe, but the U.S. government postponed declaring constitutional war until years later. Yet, in 1940, before the U.S. officially declared war, President Franklin Roosevelt established the Department of Information (DOI). The DOI, within the Office for Emergency Management, was led by Robert Horton to prepare America's national defense and promote the investment and production of military equipment.⁷² While the DOI facilitated the publication of some war posters, mainly "to ramp up production of armaments for national defense", the DOI's role in communicating to the public would be largely through the news media.⁷³ The DOI was comprised of almost 500 employees responsible for providing the American public with information about the war and the U.S. government's actions. As opposed to the CPI's WWI propaganda, the Roosevelt administration restricted the efforts to mobilize the American people throughout WWII. In fact, the DOI was abolished soon after the attack on Pearl Harbor in December, 1941. As the U.S. officially entered WWII, President Roosevelt consolidated the DOI and other federal information agencies into the Office of War Information (OWI), headed by Elmer Davis.⁷⁴ As opposed to having one, centralized entity responsible for creating government propaganda during WWI, the Roosevelt administration decentralized WWII propaganda and a "default template of federal information" was promoted.⁷⁵ Instead, the OWI

⁷⁰ Collingham, *The Taste of War*, 416.

⁷¹ *Ibid*, 415.

⁷² Nancy Snow, *Propaganda and American Democracy* (Baton Rouge: Louisiana State University Press, 2014).

⁷³ Lee, *Promoting the War Effort*, xi.

⁷⁴ *Ibid*, 182.

⁷⁵ *Ibid*, 182.

created war messages as matter-of-factly as possible. Additionally, business, factories, and various governmental agencies created their own war posters.

One of these governmental agencies was the Office of Price Administration (OPA). Fearing wartime inflation, the OPA was responsible for stabilizing prices and keeping the minimum standard of living affordable.⁷⁶ With the increased demand for war industries, previously unemployed consumers quickly found themselves, not only working again, but earning higher wages than ever before. However, the industrial boom was not producing commodities for the average consumer to purchase. Instead, production was heavily redirected to the war industry and military equipment was being produced. Therefore, many consumers were caught between having money to spend again, and having very little to spend money on. Indeed, food was one of the only commodities which consumers could purchase. American's spent eight percent more on food than prior to the war and the working class was increasingly consuming fruit and vegetables, meat, and dairy products.⁷⁷ Yet, the U.S. pledged to provide food aid to the Allied forces and European citizens and therefore, had to take action ensuring "high-quality and condensed foods" were available to be shipped overseas.⁷⁸ That action was taken by the OPA, who played a large role in promoting food conservation during WWII.

While Herbert Hoover and the USFA avoided government-mandated rationing throughout WWI, rationing became a reality for American consumers during WWII. In 1942, the OPA was granted the authority to set prices on food and "by 1943 sugar, sweets, coffee, butter, cheese, canned goods, frozen and dried vegetables and fruits, and red meat were all rationed".⁷⁹ Therefore, war posters were created to explain and justify the necessity of rationing. In an attempt to placate consumers who were agitated by rationing restrictions, food posters were used to create "a vision of a post-war world of plenty".⁸⁰ Consumers were asked, yet again, to save their money, alter their consumption, and sacrifice for the greater good.

Congress defunded most of the OWI's domestic propaganda in July 1943. During the last year of WWII, most American war campaigns were aimed abroad, rather than domestically. Immediately following the end of WWII in 1945, the OWI was dissolved by President Truman.

⁷⁶ E.T. Grether, "Price Control and Rationing under the Office of Price Administration: A Brief Selective Appraisal", *Journal of Marketing Association*, 7, no.4. (1943).

⁷⁷ Collingham, *The Taste of War*. 418.

⁷⁸ *Ibid.*

⁷⁹ *Ibid*, 419.

⁸⁰ *Ibid*, 429.

Since the end of WWII, multiple scholars have examined the role of the CPI, the USFA, the DOI, the OWI, and the OPA in presenting information and creating public discourse during times of war. The CPI of WWI has since faced heavy criticism, as its “over-the-top domestic propaganda” was “excessive, simplistic, manipulative, misleading, and anti-democratic”.⁸¹ Criticisms of the CPI affected how the DOI and the OWI would create and disseminate WWII propaganda. As Lee describes, “the unified mobilization of the nation during World War I did not occur in World War II, nor did the DOI and OWI make any serious effort to try to do so”.⁸² Regardless of their impact, during both WWI and WWII, the U.S. government asked American citizens to alter their consumption and reduce their waste, and through these attempts to influence consumers, specific foods and behaviors were targeted.

⁸¹ Snow, *Propaganda and American Democracy*, 98.

⁸² *Ibid.*

Chapter 3: Food Behaviors and Poster Propaganda in WWI

“Voluntary action has the great value of depriving those who can afford it and not those who have no margin for sacrifice”

-Herbert Hoover, 1920

The historical and political story of food in WWI is one of scarcity and conservation. WWI changed the American diet, as the U.S. government asked citizens to conserve food. Food became a vehicle for patriotism, comradeship, and hostility. Anti-German sentiment was the catalyst for renaming German foods, such as sauerkraut to freedom cabbage, or removing German foods from canteen menus, such as pretzels.⁸³ Meanwhile, the U.S. was one of the only combatant nations who did not introduce mandatory food rationing. Therefore, the following chapter explores how the U.S. government asked consumers to conserve food without implementing rationing.

3.1. Inspiring Voluntary Action

All combatant nations in WWI used poster propaganda to rally support from their citizens and to shape public opinion.⁸⁴ Shaping public opinion was crucial for the U.S. to turn a very diverse body of citizens into a unified mass, working towards the same goal, winning the war on the other side of the Atlantic Ocean. President Wilson recognized that American citizens needed to adjust their lifestyles, but first, citizens needed to want to sacrifice for the war effort. In an effort to persuade American citizens it was their duty to assist the Allied war effort, the Committee on Public Information (CPI) and the United States Food Administration (USFA) created posters to convince American citizens that sacrificing for the war should be voluntary and self-initiated. While Hoover focused the USFA's attention on the entire food industry, USFA war posters predominantly spoke to individuals. Hoover's work with the USFA was a stark contrast to the government-mandated restrictions on consumption in European countries.

Instead of mandating rationing, Hoover's food conservation efforts focused on voluntary action from both food producers and citizens. In poster 01, *Keep the Wolf from Our Own Door*, Americans are told that *“appalling conditions threaten America”* if food is wasted.⁸⁵ The appalling

⁸³ Tunc, “Less Sugar: More Warships”, 194-195.

⁸⁴ Kingsbury, *For Home and Country*, 6.

⁸⁵ Poster 01, *Keep the Wolf From Our Own Door*, Appendix B, pg. 59.

conditions are represented as a wolf in this image. A woman stands strongly in the doorstep of her home, with a small child by her side, as she aims a shotgun at the wolf, whose mouth is pulled into an aggressive sneer. Consumers are told food conservation will keep the wolf away. Therefore, food conservation is portrayed as a weapon not only to keep America safe, but also to “*prevent the government from issuing food restriction orders*”.⁸⁶ The poster states “*you owe the duty of saving food to your country and humanity*”.⁸⁷ Explicitly telling consumers that food conservation will keep the government from mandating rationing, this poster thus incentivizes voluntary action by threatening the liberty to choose how much and what to consume.

Food choices were predominantly made by women, and thus, the majority of WWI posters were aimed at influencing American women. In the early 1900’s, social gender roles dictated that the home and the kitchen was very much the woman’s domain, and in WWI, these gender roles were reinforced with men fighting abroad. The woman’s role in the home, and particularly the kitchen, would be a cornerstone for altering food behaviors. Thus, many of the USFA’s propaganda posters either attempt to persuade women they are responsible for voluntarily conserving food or the posters use women to persuade men to alter their behaviors.

The middle-class woman would become essential to Hoover’s food conservation plans, which became known as ‘Hooverization’. Perhaps Hooverization’s greatest impact came from Hoover’s promotion of the domestic science movement. The domestic science movement taught women the skills necessary to run the home and the kitchen, according to scientific and cultural standards. While domestic science began well before WWI, the movement “took on a military zeal” as Hoover used the domestic science movement to recruit women into his food conservation plan, creating an “American Army of Housewives”.⁸⁸ Hoover believed American women were crucial to national security and conserving food became a taught science on a larger scale than ever seen before. The educated woman must know how to run the kitchen properly in order to carry out her patriotic duties. In poster 02, *Be Patriotic*, Lady Liberty stands with her arms open wide and asks women to “*sign your country’s pledge to save food*”.⁸⁹ This poster is simple in appearance, but its message is strong. Lady Liberty, wrapped in the American Flag, looks slightly down her nose towards the viewer, implying that women may be shamed for not being patriotic.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Kingsbury, *For Home and Country*, 30-34.

⁸⁹ Poster 02, *Be Patriotic*, Appendix B, pg. 59.

By pledging to conserve food, women do not risk being shamed, but instead join the other members in America's Army of Housewives. Similarly, Kingsbury describes Hoover's conservation propaganda as "a system of hands-on coercion that was impossible for the patriotic woman to resist".⁹⁰ Therefore, through Hooverization and the domestic science movement, conserving food became a housewife's patriotic duty.

In poster 03, *The Greatest Crime in Christendom*, wasting food is labeled a crime. While the poster text does not explicitly state that women are responsible for not wasting food, the poster image portrays a woman scraping food scraps into a garbage can. Although the woman appears calm, the text states "*to buy-to cook-to eat more than you need [...] is a crime*".⁹¹ The poster goes further to describe why wasting food is the greatest crime in Christendom and why women should be concerned, stating:

Ten million have died bravely on the field of battle. They at least had a chance. They gave their all willingly and unselfishly. Over twenty million have died of starvation-without even a chance to fight. To these death has come only as a relief from torture worse than death-starvation.⁹²

By drawing relationships between the woman committing this crime and the millions of people starving in Europe, this poster uses guilt to motivate women to "*live simply*" and "*avoid all food waste*".⁹³ The stark contrast between the woman's calm demeanor and the crime's severity described in the poster text reinforces the idea that the American woman viewing this poster may have been committing the same crime, unknowingly. However, after viewing the poster, the law-abiding woman has not only been informed that wasting food should be considered a crime, but also has been reminded that it is her job "*to save food so that the millions of starving people in Europe may have SOMETHING to eat*".⁹⁴ While guilt is the predominant emotion persuading women in this poster, WWI posters were created to inspire voluntary action by calling on all Americans to conserve food.

In addition to women, war posters targeted children and men. Most war propaganda which was directed towards children came in the form of games, music, and toys. However, Poster 04,

⁹⁰ Kingsbury, *For Home and Country*, 28.

⁹¹ Poster 03, *The Greatest Crime in Christendom*, Appendix B, pg. 59.

⁹² *Ibid.*

⁹³ *Ibid.*

⁹⁴ *Ibid.*

An Heroic Sacrifice, portrays a young boy and his dog sacrificing for the war effort. A humorous cartoon tells a light hearted story about sacrificing for the greater good as the young boy and the dog “solomonly sware [they] wont eat no more ice creem what’s maid with suger nor no more candy”.⁹⁵ As the boy holds his right hand up and the dog holds his right paw up, they both look longingly into the candy shop window. While this poster specifically calls on children to do their duty for the war effort, the boy and his dog are making a *heroic* sacrifice, which places pressure on parents; if the boy and his dog can do it, so can adults. In poster 05, *Sir-don’t waste while your wife saves*, men are also asked to do their share. As an affluent man sits smoking a cigar with multiple plates of half-finished food before him, this poster asks men to consider the efforts their wives are making to help America win the war. The gentleman in the image is asked to “*adopt the doctrine of the clean plate*”, and all male viewers are concurrently asked to “*do [their] share*”.⁹⁶ Although this poster asks men to do their share, food conservation is still represented as the woman’s duty, because it is implied that men should be motivated by the efforts their wives are already making. These WWI posters used and perpetuated the social structure of family and gender roles to persuade viewers that food conservation efforts were normal and necessary.

While many WWI posters used gender roles, the U.S. was also a melting pot of different nationalities, cultures, and allegiances. When the U.S. entered WWI in 1917, almost one third of the American population were immigrants or the children of immigrants.⁹⁷ Additionally, President Wilson was aware that populations within America held allegiances to their native countries. Approximately 10 million Americans had immigrated from one of the Central Power nations, including Germany, Austria-Hungary, Bulgaria, and the Ottoman Empire.⁹⁸ Therefore, in an effort to unite a diverse America, immigrants were specifically called on to support the war effort. Poster 06, *Food Will Win the War*, was printed by the USFA in multiple languages including Yiddish, Italian, Spanish, and Hungarian, targeting immigrant groups who either could not read English or were more comfortable reading in their native language. The poster states “*you came here seeking freedom, you must now help to preserve it*”,⁹⁹ directly telling immigrants they are now a part of the Allied force. The immigrants’ duty was to consume less wheat as the poster explicitly states,

⁹⁵ Poster 04, *An Heroic Sacrifice*, Appendix B, pg. 59.

⁹⁶ Poster 05, *Sir, Don't Waste Food While Your Wife Saves*, Appendix B, pg. 60.

⁹⁷Tunc, “Less Sugar, More Warships”, 204.

⁹⁸ Ibid.

⁹⁹ Poster 06, *Food Will Win the War*, Appendix B, pg. 60.

“*WHEAT is needed for the allies*”.¹⁰⁰ The statue of liberty stands underneath a rainbow in the background of the image, indirectly portraying America as a promise land of freedom. The promise of freedom in the U.S. is then connected to wheat in this image. Immigrants are asked to “*waste nothing*” because “*food will win the war*”, implying it is their duty to help.¹⁰¹ By using explicit commands and showing implicit relationships, WWI posters targeted women, children, men, and immigrants as specific groups within the American population who were each needed to voluntarily conserve food. Citizens were asked to conserve food by reducing their consumption and eating less.

3.2. Reducing Consumption

Hoover’s food conservation efforts were based on inspiring voluntary action, but in order to curb consumption, citizens needed to know what types of food were necessary for the war effort. Therefore, war posters informed citizens which foods to consume less. Throughout WWI, red meat, wheat flour, and oils were needed to be shipped to Europe. Additionally, eggs, butter, and dairy products were in short supply because male dairy farmers left their farms to fight overseas or work in war factories.¹⁰² However, many other foods were offered to citizens as alternatives, and these substituted foods left a lasting impact on the American diet. Cookbooks and magazines, along with the domestic science movement, brought about new recipes, alternative foods and products, such as Crisco and seafood, and a better understanding of calories and nutrition. Yet, the foods which were targeted for conservation, and even their war-appropriate alternatives, changed throughout the war. Citizens were told that conditions would vary from day to day because “food shortages were a constant reality”.¹⁰³ While potatoes were heavily promoted as a war-friendly food, after a poor potato crop yield in the spring of 1917,¹⁰⁴ rice had to be promoted instead of potatoes.¹⁰⁵

Additionally, adopting wheatless and meatless days indicated whether a restaurant, kitchen, or family was supporting the war effort. Almost half of America’s families signed pledge

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Tunc, “Less Sugar, More Warships”, 209.

¹⁰³ Kingsbury, *For Home and Country*, 37.

¹⁰⁴ Ibid, 36.

¹⁰⁵ Ibid, 29.

cards, stating they would follow meatless and wheatless days.¹⁰⁶ In April 1918, Anna B. Scott proposed the “50-50” plan, which asked women to use 50 percent less wheat in recipes, by using 50 percent wheat alternatives instead.¹⁰⁷ Wheat was one of the most needed commodities in Europe and, therefore, consumers were asked to alter their wheat consumption so the U.S. could ship wheat overseas¹⁰⁸. The USFA created poster 07, *Save a Loaf a Week*, encouraging American citizens to voluntarily reduce their consumption of wheat products. The loaf of bread became a symbol of patriotism, because saving a loaf a week was a straightforward task which was explicitly stated would “*help win the war*”.¹⁰⁹ In order to preserve wheat, citizens were asked to use alternatives in baking and cooking, such as potatoes, rice flour, and rye flour.¹¹⁰ In poster 08, *Patriots*,¹¹¹ cornmeal was suggested as a cheap, tasty alternative to wheat and was endorsed as patriotic because it could not be shipped overseas. Therefore, using cornmeal was not harming the war effort. In addition to promoting cornmeal as a wheat alternative, free recipes were offered to make swapping ingredients easier, thus helping women transition to war-friendly recipes.

Sugar was also heavily targeted during WWI. Sugar was imported from the Caribbean and the U.S. needed to direct all resources towards the war effort.¹¹² In poster 09, *Sugar Means Ships*, women are asked to consume fewer “*sugar sweetened beverages*”.¹¹³ Using both explicit text and a graphic cartoon, this poster emphasizes the consequences of consuming excessive amounts of sugar and urges women not to ignore the war efforts. When a larger than life woman drinks from her beverage, she creates a whirlpool in the ocean, which causes ships carrying supplies and soldiers to be pulled away from the war effort. As this woman sits on top of a city, seemingly oblivious to the consequences of her consumption, a larger than life soldier stands below a war cloud on the other side of the ocean, saying “*hurry*”,¹¹⁴ emphasizing the relationship between women’s’ actions on the home front and soldiers’ needs on the war front. In addition to consuming less sugar, war posters showed consumers alternatives they could use. For instance, in poster 10, *Eat Cane Syrup & Molasses*, the USFA promotes an alternative product to sugar. Consumers are

¹⁰⁶ Tunc, “Less Sugar, More Warships”, 207.

¹⁰⁷ Kingsbury, *For Home and Country*, 46.

¹⁰⁸ *Ibid*, 35.

¹⁰⁹ Poster 07, *Save A Loaf A Week*, Appendix B, pg. 60.

¹¹⁰ Kingsbury, *For Home and Country*, 40.

¹¹¹ Poster 08, *Patriots*, Appendix B, pg. 60.

¹¹² Tunc, “Less Sugar, More Warships”, 209.

¹¹³ Poster 09, *Sugar Means Ships*, Appendix B, pg. 61.

¹¹⁴ *Ibid*.

asked to “*save sugar by using best Louisiana Molasses and Sugar Cane Syrup*”.¹¹⁵ This poster does not explicitly refer to the war through text. Yet, a small banner depicts the silhouettes of soldiers carrying bayonets, reminding the viewer that these sweet alternatives are helping the war effort. Alternatives such as molasses could be produced within America, thus reducing the need for ships to import sugar from the Caribbean.

In addition to wheat and sugar, citizens were asked to consume less meat. During WWI, many alternatives for meat were already well known, but less appealing, such as liver, horsemeat, or whale. However, poster 11, *Eat More Cottage Cheese*, makes a case for eating cottage cheese instead of meat. Cottage cheese is portrayed as a cheaper alternative which “*supplies more protein than*” beef, pork, lamb, veal, or fowl.¹¹⁶ Not only is cottage cheese offered as a superior alternative to meat nutritionally, but recipes are also offered, giving the average consumer more ideas for using this newly promoted product. While the poster commands, “*eat more cottage cheese*”, the poster also asks “*Cottage cheese or meat?*” and tells the viewer to “*Ask your pocketbook!*” justifying the alternative as a way to save money.¹¹⁷ In addition to cottage cheese, fish was recommended by the USFA instead of red meat which was needed in Europe. In poster 12, *Save the Products of the Land*, consumers were asked to eat more seafood because fish “*feed themselves*”.¹¹⁸ Fish are portrayed as self-sufficient, which was a strong American value, thus connecting with the self-sufficient viewer emotionally. As citizens were asked to eat less wheat, sugar, and meat, war posters needed to remind Americans why reducing consumption was necessary for the war effort.

3.3. Bridging the Home Front with the War Front

Convincing citizens to alter their food behaviors and conserve food required persuading consumers that these inconveniences were worth it. Therefore, many war posters used food to connect actions on the home front with their consequences on the war front. These posters reminded Americans a war was going on in the distance and food became one of the vehicles through which the consequences of individuals’ food behaviors were emphasized.

¹¹⁵ Poster 10, *Eat Cane Syrup & Molasses*, Appendix B, pg. 61.

¹¹⁶ Poster 11, *Eat More Cottage Cheese*, Appendix B, pg. 61.

¹¹⁷ Ibid.

¹¹⁸ Poster 12, *Save the Products of the Land*, Appendix B, pg. 61.

In poster 13, *Blood or Bread*, a parallel is made between bread on the home front and blood on the war front. “*Others are giving their blood*”,¹¹⁹ reminds those who are ‘safe’ in the U.S., that lives are being lost in Europe. The USFA created this poster, among others, to convince American citizens the Allied war was theirs to fight. The vivid and violent sketch of a man straining to carry another wounded man on the battlefield portrays war’s violence and elevates food conservation’s importance. This poster gives the viewer a large responsibility to “*save life if you eat only what you need and waste nothing*”,¹²⁰ using guilt to persuade consumers to conserve food. Additionally, citizens on the American home front may not have been able to visualize how conserving food in their kitchen could have an impact in Europe. In poster 14, *Keep it Coming*, a line of trucks carry food down a snow covered mountain, showing the viewer another step in the food conservation process. This poster serves as a reminder to continue conserving food for the war effort, because America was not only feeding soldiers, but also “*the millions of women & children behind [Allied] lines*”.¹²¹ This poster’s use of women and children occurs throughout many WWI posters to pressure the American women, who may not know anyone living in Europe, but can empathize with the women and children who are going hungry overseas.

Conserving food was often justified by the idea of feeding others. Multiple WWI posters depict starvation and ask American citizens to reduce food waste and to consume less in order to help those who are starving overseas. In poster 15, *Don’t Waste Food While Others Starve*,¹²² a thin woman stands slightly above a crowd of people. She holds a small baby against her chest, and two young children stand on either side of her waist. The young girl and the woman look off into the distance, as if expecting something, while the young boy looks down towards the ground, seemingly tired or defeated. Although the characters in this image are the focal point, the hands of the other people in this crowd are raised towards the sky, creating a feeling of desperation. Additionally, the young girl holds her hand out in need as the poster tells the American viewer not to waste food while others are starving. While the explicit command of the poster’s text is simple, the graphic image is complex, portraying desperation. Therefore, the combination of text and imagery in this poster creates a strong urge to help others.

¹¹⁹ Poster 13, *Blood or Bread*, Appendix B, pg. 62.

¹²⁰ Ibid.

¹²¹ Poster 14, *Keep it Coming*, Appendix B, pg. 62.

¹²² Poster 15, *Don’t Waste Food While Others Starve*, Appendix B, pg. 62.

Similarly, poster 16, *Save Food for World Relief*, combines text and imagery to tell a similar story. A pencil sketch portrays a mother sitting with her head in her hands as her daughter sifts through the rubble beneath them, which may have been their home. As the viewer is imagining what this mother and daughter have been through, the text reads “*that crust of bread you wasted- that bit of meat you nibbled and left- that plate of leftovers that are spoiling- each is small in itself, but the total waste is staggering*”.¹²³ While this poster brings the idea and destruction of war into America, the viewer is also told “*you can help. Eat less - waste nothing*”,¹²⁴ inspiring the viewer to take small actions in their home to help the women and the children overseas. Whether the viewer feels empathy for those who are starving or feels guilty for having enough food to eat while others do not, these graphic images attempt to give the American viewer a glimpse into someone else’s life, someone who is being directly affected by the war.

Not only did WWI posters try to bring the image of war to the American viewer, but war posters also personified food as if the food itself was doing the fighting. These images suggested that food alone could be a source of victory and as Kingsbury states, “such an oversimplification ignores questions of weapons, manpower, strategy, and even weather - all the factors that together determine which side wins a battle and ultimately a war”.¹²⁵ Even still, these war posters were successful in portraying a relationship between food behaviors and the war effort. In poster 17, *Food is Ammunition-Don’t Waste it*,¹²⁶ a basket of food sits on a hillside. In the background, men on horseback fly the American flag proudly and wasting food was equated with wasting ammunition. Wasting ammunition directly portrayed a disadvantage for winning the war. Thus, wasting food was portrayed as an unpatriotic act.

While food conservation was being explicitly portrayed as patriotic, WWI posters also used the enemy to persuade individuals that food could play a role in winning the war. In poster 18, *Defeat the Kaiser and His U-Boats*, the Kaiser stands in shadow on the side of the image and watches as a ship sinks in the background. Not only is the enemy depicted in the image and named in the poster text, but the poster used a recent and historically important event to connect emotionally with the viewer. In 1915, a German U-boat caused an uproar when it sunk the American ship ‘Lusitania’. Therefore, this poster capitalizes on an individual’s animosity towards

¹²³ Poster 16, *Save Food for World Relief*, Appendix B, pg. 62.

¹²⁴ Ibid.

¹²⁵ Kingsbury, *For Home and Country*, 41.

¹²⁶ Poster 17, *Food is Ammunition-Don’t Waste It*, Appendix B, pg. 63.

the enemy, and uses hate to inspire the viewer. By providing the viewer with a solution to victory, “eat less wheat”,¹²⁷ individuals were given a simple task through which they could direct their motivation for beating the enemy. Citizens are told “victory depends on which fails first, food or frightfulness”.¹²⁸ Therefore, this poster attempts to persuade individuals that eating less wheat on the home front would help America win the war.

The Kaiser is also depicted as the enemy through canning, which was a popular war activity to preserve foods and keep them from spoiling for longer amounts of time. War propaganda promoted canning food as a way to extend the shelf-life of fruits and vegetables grown in victory gardens. Not only did canning help preserve food on the home front, but some women also donated canned goods to be shipped abroad for soldiers. Even before WWI, canning clubs were established around the nation and these groups would be very important in promoting canning as a patriotic war activity. Therefore, poster 19, *Win the Next War Now*, speaks directly to the American housewife and implies that canning fruits and vegetables on the home front will help defeat the enemy. The Kaiser’s face is pictured inside of a glass jar, and his hat and sword are wrapped around the jar, indicating that once victory is won, the Kaiser will be out of commission, and no longer a threat. Therefore, canning is promoted as a patriotic food behavior, as citizens are asked to “can vegetables, fruits, and the Kaiser too” in a relentless effort to win the war.¹²⁹ These posters asked citizens to conserve food each day and hoped the momentum of saving food would last until the end of the war.

3.4. Do Not Stop Saving Food

Even after the military victory was won by the Allied forces in 1918, war posters still urged citizens to reduce food waste and to consume less. Some WWI posters explicitly state that the military victory had already been won, such as poster 20, *300 Million Hungry People are Watching your Plate*. A tabletop covered in plates full of food sits above the poster text. The idea that hungry people can see the food you eat or waste is unrealistic, yet, the viewer may feel guilty for eating excessively and wasting food after reading the following text:

In Serbia, Poland, Belgium, Armenia and in other countries thousands upon thousands of people, old and young have starved to death. Although the military victory is now ours, we

¹²⁷ Poster 18, *Defeat the Kaiser and His U-Boats*, Appendix B, pg. 63.

¹²⁸ Ibid.

¹²⁹ Poster 19, *Win the Next War Now*, Appendix B, pg. 63.

must, for the safety of the world - to make our victory complete- fight the great spectre of famine that is stalking through Europe.¹³⁰

Now that the military enemy had been defeated, personifying ‘famine’ created a new enemy, thus giving the viewer another battle to fight and another reason to continue conserving food. The poster text also asks the viewer to consider their own actions.

When you have finished your meal -is there any food left on your plate- did you order or serve yourself more than you needed? If you have been thoughtless in your kitchen - at your table - in the restaurant- start with your next meal and do your share in this great reconstruction work.¹³¹

This dialogue allows the viewer to be honest with themselves and stresses that it is not too late to start. Using an iconic American figure, the poster states “*Uncle Sam asks for - simple living- clean plates- no extra meal*”,¹³² helping the viewer understand how to help fight the new enemy, famine.

Other posters were created which do not provide as much detail, but ask Americans to continue conserving food. In poster 21, *Don't Let Up*, an image shows an Allied soldier standing tall above an enemy soldier who is lying on the ground. This poster urges Americans “*don't let up, keep on saving food*”.¹³³ This poster reminded Americans that food conservation was still necessary to help feed the world, although the military victory had been won. While some of the messages from WWI food conservation posters were recycled in WWII posters, WWII food conservation posters shifted from inspiring voluntary action to justifying rationing, which I will now explore in chapter 4.

¹³⁰ Poster 20, *300 Million Hungry People are Watching Your Plate*, Appendix B, pg. 63.

¹³¹ Ibid.

¹³² Ibid.

¹³³ Poster 21, *Don't Let Up*, Appendix B, pg. 64.

Chapter 4: Food Behaviors and Poster Propaganda in WWII

“People should wake up to find a visual message everywhere, like new snow-every man, woman, and child should be reached and moved by the messages.”

-A spokesperson for the OWI

The decade prior to WWII was one of unemployment, economic hardship, and perseverance by the American people. The Great Depression and the Dust Bowl challenged the American people and caused a shift in American values. Thriftiness and frugality became necessary, as families struggled to make ends meet. Years later, WWII would become known as the ‘good war’ because, for many Americans, the quality of life improved throughout WWII. By 1944, many families doubled their wages, which drastically improved the working class’s nutritional state. Emerging from difficult times and with more people having an increased income, the U.S. had to institute rationing throughout the war. Rationing food would require consumers to sacrifice in the kitchen, although they had more money to spend than the previous decade. Therefore, the following chapter explores how WWII posters justified rationing and asked consumers to conserve food.

4.1. Government-mandated Food Rationing

In WWII, the U.S. government introduced rationing to ensure a more equal distribution of crucial resources such as petrol and food. The Office of Price Administration (OPA) was responsible for managing the prices of goods, which were expected to rise in the war economy. One method for keeping inflation down was to control prices by persuading consumers to follow rationing guidelines. While four different programs rationed various goods throughout WWII, point rationing began in February 1943. Point rationing was based on the British model for rationing food, where each individual was given their own coupon book.¹³⁴ Coupons could then be exchanged for certain foods. Consumers had the flexibility to shop according to their own food preferences, while the amount which could be purchased at any given time was limited.¹³⁵ However, having more money than before the war, food became another commodity exchanged in black markets. Although rationing was mandated across the nation, it was difficult for shop

¹³⁴ Collingham, *The Taste of War*, 419.

¹³⁵ Witkowski, “World War II Poster Campaigns”, 76.

owners to keep up with ever changing instructions from the OPA. Additionally, if lucky, consumers could still get extra goods by bribing shop owners.¹³⁶ Thus, various governmental departments created WWII posters to justify the necessity of rationing and to persuade American consumers to follow the rationing guidelines.

The U.S. government wanted consumers to understand that rationing was not enforced to limit consumers, but rather rationing was enforced to ensure enough food would be available for everyone. In poster 22, *Rationing Means a Fair Share for All of Us*,¹³⁷ two cartoons show the same three individuals in a meat shop, but under two different scenarios. The first image, which takes up the top half of the poster, shows one well-to-do woman with her arms full of meat packages. As this older woman walks away from the counter, the shop owner looks very apologetic towards a younger woman who wants to purchase meat, but there is only a small piece of meat left. The shop owner points his thumb towards the older woman, who has her eyes closed and her head held high. This cartoon emphasizes how without rationing the shop owner cannot help all of his customers. However, the bottom half of the poster shows the outcome of the same scenario when rationing guidelines are being followed. In this scene, all three individuals are pleased because both customers have a fair share of goods. The shop owner smiles while the two women hold up their ration books proudly. The older woman has her eyes open and is able to engage pleasantly with the others in the store, showing the viewer that rationing keeps food distribution equal, although it may feel limiting at first.

Rationing did limit the amount of certain foods available to be purchased by a single individual, and thus, food posters recommended victory gardens as a way to bolster the diet. In poster 23, *Plant a Victory Garden*,¹³⁸ three people are pictured working with the land and filling a basket with vegetables. Victory gardens are portrayed as an option to help ration points go further for the average family. Nearly 20 million victory gardens were planted across the U.S.,¹³⁹ offering those, who could grow their own produce, a variety of vegetables in addition to their rationed goods.

¹³⁶ Adeline Levine and Murray Levine, "WWII and the Home Front: The Intersection of History and Biography", *American Journal of Orthopsychiatry*, 81, no.4. (2011), 436.

¹³⁷ Poster 22, *Rationing Means a Fair Share For All of Us*, Appendix B, pg. 64.

¹³⁸ Poster 23, *Plant a Victory Garden*, Appendix B, pg. 64.

¹³⁹ Collingham, *The Taste of War*, 418.

WWII posters were also used to explain how rationing on the home front was helping the war effort overseas. In poster 24, *Do With Less-So They'll Have Enough*, a soldier is smiling and looking directly at the viewer, holding a tin mug up as if he is about to drink or sip from it. This soldier is the justification for rationing, urging consumers to ration because “*rationing gives you your fair share*”.¹⁴⁰ This image acknowledges that rationing is restricting, but the poster asks the viewer to think of the American soldiers overseas. By depicting rationing as helpful to the American soldier, accepting rationing and the limitations imposed by rationing shows support for the soldiers who also need to eat. Rationing became a patriotic duty and a way to support the war effort. While WWII posters urged consumers to follow rationing guidelines, consumers were also asked to conserve foods which were not under rationing restrictions. Thus, WWII posters asked women to join the ranks and efficiently manage kitchens across America.

4.2. Women Join the Ranks

Women continued to be the dominant target audience of WWII posters. While more women took jobs in war factories during WWII, the woman’s role in food conservation was still fundamental to the war. Women were asked, not only to support the war effort, but to become an army of housewives, fighting the good fight, from the farm, the kitchen, and the war factory. Poster 25, *Join the Ranks*, asks women to “*buy to save, serve to save, store to save*”.¹⁴¹ Three women are pictured from the bust up, as they look off into the distance proudly. The women pictured represent middle-class America, allowing other women to picture themselves joining the ranks to “*fight food waste in the home*”.¹⁴² This poster is one of many from the Bureau of Home Economics. A series of posters were created and published in the Bureau of Home Economics which instructed women how to manage, preserve, and conserve food in the kitchen. Poster 26, *Sugar-Flour-Cereal-Spice*, and poster 27, *Milk and Eggs-Nature’s Food*, offer specific instructions to protect important food items from spoiling before they could be consumed. For instance, knowing that “*clean milk will keep several days at 40 ° - 45 ° degrees F.*”,¹⁴³ and to “*watch out for weevils in hot weather*”,¹⁴⁴ provided women with the knowledge necessary to reduce food waste.

¹⁴⁰ Poster 24, *Do With Less-So They'll Have Enough*, Appendix B, pg. 64.

¹⁴¹ Poster 25, *Join the Ranks*, Appendix B, pg. 65.

¹⁴² Ibid.

¹⁴³ Poster 27, *Milk and Eggs-Nature’s Food*, Appendix B, pg. 65.

¹⁴⁴ Poster 26, *Sugar-Flour-Cereal-Spice*, Appendix B, pg. 65.

Nutritional science was also integrated into WWII food conservation efforts. In poster 28, *Fruit You Waste Here*, individuals are told that “Vitamin “C” (Ascorbic Acid) found in citrus fruits is an aid to healing wounds and building tissue”.¹⁴⁵ This nutritional fact is used to explain the message “Fruits you waste here!... May prevent his wounds from healing there!”.¹⁴⁶ The viewer can connect food waste at home with a lost nutrient, which could have aided in healing a soldier’s battle wounds. While food posters utilized nutritional facts to preach food conservation, food preservation techniques were also a focus during WWII.

In poster 29, *We’ll Have Lots to Eat this Winter, Won’t We Mother?*,¹⁴⁷ canning is portrayed as an activity which will create an abundance of food. An iconic American woman is pictured with her daughter, wearing matching aprons, as they can peas and carrots. WWII posters used this ideal image of a woman to inspire women who wanted to fit into social norms and master the domestic role. An abundance of food is presented behind these characters, signaling to the viewer that canning will provide their family with plenty to eat and improve their domestic capacity. Additionally, throughout WWII posters, canning is depicted as a necessary war job which women should be doing. Poster 30, *Of Course I Can!*, not only shows a young woman who is not worried about ration points, but also normalizes canning. Portraying a woman who describes herself as “patriotic as can be”,¹⁴⁸ women may have felt pressured to can, as if they should be similar to the woman in this image. Whereas, poster 31, *Can All You Can*, does not include a female character. Instead, this poster shows an empty can laying on a bed of fresh fruits and vegetables and states “it’s a real war job”.¹⁴⁹ By excluding a female character from poster 31 and declaring that canning is a real war job, women who did not fit into the standard domestic role, could still feel pressured to can as their patriotic duty, rather than their domestic duty.

4.3. Food Conservation in Military Canteens

Throughout WWII more than 16 million men and women joined the armed services.¹⁵⁰ Thus, soldiers were both targeted more as viewers and used more as characters in posters, telling loved ones that conserving food will bring American soldiers home. The U.S. Navy and the U.S.

¹⁴⁵ Poster 28, *Fruit You Waste Here*, Appendix B, pg. 65.

¹⁴⁶ Ibid.

¹⁴⁷ Poster 29, *We’ll Have Lots to Eat This Winter, Won’t We Mother?*, Appendix B, pg. 66.

¹⁴⁸ Poster 30, *Of Course I Can!*, Appendix B, pg. 66.

¹⁴⁹ Poster 31, *It’s a Real War Job*, appendix B, pg. 66.

¹⁵⁰ Levine and Levine, “WWII and The Home Front”, 434.

Army used posters to keep up morale and preach food conservation in military canteens. Some posters aimed at soldiers used humor and light-hearted messages to boost morale while asking soldiers to conserve food. In poster 32, *You Were Right Sir!*, a navy captain sits inside of a trashcan, while a line of young navy sailors stand in an awkward queue next to the trash can. The sailors are very uncertain of what to do, because they are holding trays full of food, which they cannot throw away. Another senior, the naval chief, sneers and tells the captain “*You were right sir! The men do seem a little reluctant to throw food away*”.¹⁵¹ While this poster never explicitly tells sailors not to waste food, the captain in the trashcan can represent a superior officer seeing them waste food or watching their actions. Therefore, using a comical image, naval sailors are informed they should not waste food because their superiors do not approve.

Conversely, poster 33, *Thank You So Much, American Soldier*, uses sarcasm to engage soldiers in food conservation. A colorful background, which efficiently catches a viewer’s attention, is the rising sun flag used by the Japanese military. Standing boldly in the center of the image, Hideki Tojo, the Japanese Imperial Army general, looks down onto the viewer, while holding a gun, and says “*Thank you so much, American Soldier, For Wasting Food*”.¹⁵² This poster emphasizes that wasting food will “*help Tojo win the war*”.¹⁵³ Soldiers overseas fighting for the Allied war effort, would never want to help Tojo win the war. The use of sarcasm in this poster text combined with strong imagery, creates pressure within the soldier not to allow Tojo to win the war. Thus, inspiring soldiers to watch their waste in the canteen.

Rather than using the enemy to inspire food conservation amongst soldiers, poster 34, *Valley Forge*, reminds American soldiers of the sacrifices soldiers made during the Revolutionary War. No battle was fought at Valley Forge, yet, it is considered the turning point of the revolutionary war against Great Britain, as George Washington and the continental army survived a harsh winter outside of Philadelphia.¹⁵⁴ This poster is a nostalgic representation of men surviving harsh conditions for a greater purpose, as a continental soldier is depicted sitting on a log in the snow, holding a piece of meat over a fire with a small stick. The soldier is wrapped in clothing which appears torn and weathered, yet he appears content with the given situation. The poster

¹⁵¹ Poster 32, *You Were Right Sir!*, Appendix B, pg. 66.

¹⁵² Poster 33, *Thank You So Much American Soldier*, Appendix B, pg. 67.

¹⁵³ Ibid.

¹⁵⁴ Stephanie Butler, *Starving Soldiers at Valley Forge*, History, September 27, 2013, <https://www.history.com/news/starving-soldiers-at-valley-forge>.

claims “no one had to tell HIM to save food & equipment”,¹⁵⁵ using both nostalgia and guilt to remind the American WWII soldiers that others have sacrificed before, and now is their time to conserve food, making sacrifices for the greater good.

Additionally, soldiers were reminded of the home front. The U.S. Navy created poster 35 to emphasize the connection between U.S. farmers and food waste, stating “*You Bite the Hand That Feeds You... When You WASTE Good Navy Chow*”.¹⁵⁶ A cartoon shows a farmer’s face, with a long white goatee and a straw hat. The farmer looks down with surprise at a soldier, who is biting his hand. Notably, the soldier is drawn as a foolish character, thus depicting those who waste food as both disrespectful and foolish. The parallel drawn between the U.S. farmer and food, re-establishes the soldiers’ connection to the home front and implies that food conservation is another way to protect the American farmer. While this Navy poster uses the American farmer, the U.S. Army used American children in poster 36, *Small Fry*. The poster image depicts a young boy and girl sitting in a frying pan and the U.S. Army promises to “*safeguard their future*” because America is not “*fighting this war to give America a lot of rickety, undernourished kids*”.¹⁵⁷ Therefore, soldiers in the U.S. Army were asked to remember their children or the children of their friends as a reason to conserve food, and were told “*when soldiers waste food, they feel the pinch*”.¹⁵⁸ By using children, this WWII poster used emotion to inspire food conservation. Rather than sacrificing for ‘the greater good’ or the war effort, soldiers may be more inspired to conserve for the children on the home front.

When WWII posters were not speaking directly to soldiers, soldiers were used to motivate those on the home front to conserve food. Poster 37, *To Speed Our Boys Home*, was created to be hung in kitchens on the home front “*to serve as a daily reminder*” that citizens on the home front are duty bound to “*help shorten the war*” and “*save American lives*”.¹⁵⁹ The only justification given for the relationship between conserving food and saving American lives by shortening the war is that food is “*a precious fighting weapon*”.¹⁶⁰ Although food could not directly fight the war, this idea would become an important slogan for many war posters. More importantly, poster 37 asks people to score themselves and their families based on four food behavior categories:

¹⁵⁵ Poster 34, *Valley Forge*, Appendix B, pg. 67.

¹⁵⁶ Poster 35, *You Bite the Hand that Feeds You*, Appendix B, pg. 67.

¹⁵⁷ Poster 36, *Small Fry*, appendix B, pg. 67.

¹⁵⁸ Ibid.

¹⁵⁹ Poster 37, *To Speed Our Boys Home*, Appendix B, pg. 68.

¹⁶⁰ Ibid.

producing, conserving, sharing, and playing square with food. Playing square with food was a slogan used to urge citizens to turn in rationing stamps and to pay no more than legal prices. These four food behavior categories highlight the potential actions individuals could take to support the U.S. war effort through food. While the idea that “*food is the mightiest weapon of them all*” is an abstract concept,¹⁶¹ which does not take into account actual weapons, the checklist provided in this poster image portrays four important relationships individuals could have with food during the war including: producing food through a farm or a garden; conserving food by not wasting, preserving food, and following nutritional guidelines; sharing food with the Allied forces and accepting rationing; and lastly, playing square with food. Hanging this poster in the kitchen, allowed Americans to see the potential relationships they could have with food each day, inspiring food conservation and providing clear instructions.

4.4. Food is Weaponized

The slogan ‘food is a weapon’ was used in WWI and re-used heavily in WWII. In perhaps one of the most iconic food posters from WWII, poster 38, *Food is a Weapon*, simply tells viewers “*don’t waste it*”.¹⁶² The eerie green background combined with a plate holding bare chicken bones, creates a spooky and almost violent image. The color green and the lack of a human character reinforces the feeling of men being away at war, as a used napkin and an empty glass sit beside the empty plate. The viewer is told to “*buy wisely-cook carefully-eat it all*” and to “*follow the national wartime nutrition program*”.¹⁶³ The chicken bones in this image serve two purposes. First, the chicken bones add to the violent aesthetic. Secondly, whomever was eating here, has left only the inedible contents of the meal behind, thus following the poster’s instructions. Less violently and more explicitly, food is personified in poster 39, *Our Food is Fighting*, portraying a more logical relationship between food and war. A wooden box labeled food floats underneath a red parachute. In the background, white parachutes hold men up as they follow the box of food towards the ground. In this poster, food supplies the soldiers with enough energy to fight for America, rather than food fighting on its own. The viewer is also reminded to “*buy wisely-cook*

¹⁶¹ Ibid.

¹⁶² Poster 38, *Food is a Weapon*, Appendix B, pg. 68.

¹⁶³ Ibid.

carefully-store carefully-use leftovers”,¹⁶⁴ which are all actions the consumer could do to conserve food for the war effort.

In addition to asking Americans to use leftovers, WWII posters focused on recycling food waste into needed resources. In poster 40, *Vital War Materials from Salvaged Kitchen Waste*, citizens were told to keep different types of trash separate and to “*keep ‘em clean*”,¹⁶⁵ because kitchen waste could be used to make explosives, medical supplies, and animal food. This poster image not only explains five different types of kitchen waste using text, but also shows five trash cans organized and labeled along the bottom of the image including, “*edible garbage, inedible waste, cooked grease, trap grease, bones & meat trimmings*”.¹⁶⁶ This image allows the viewer to better understand how to organize and separate their waste, while also being reminded that by separating waste, they are contributing to the creation of explosives, medical supplies, or animal food.

The aftermath of cooking would serve as another focus for WWII propaganda. While meat was rationed and less available for the average household, the grease or fat from cooking meat was wanted by the U.S. government. Fat salvage programs sprang up around the country and participating meat dealers kept placards in their shop windows to show they were participating. Waste fats were used in the making of glycerin, which was used to make explosives. Women were told to save their waste fats because one pound of fat could make around a pound of explosives. Even Disney contributed to the fat salvage programs with a cartoon of Minnie Mouse and Pluto in the kitchen.¹⁶⁷ When Mini goes to pour the bacon grease into Pluto’s dog bowl, as a tasty treat, an announcement comes in over the radio telling Mini “Don’t throw away that bacon grease”.¹⁶⁸ The announcer goes on to explain that “a skillet of bacon grease is a little munitions factory”.¹⁶⁹ At first, Pluto is quite disgruntled that he will not get his tasty treat, but he hears the radio voice declare “your pound of waste fat will give some boy at the front an extra clip of cartridges”.¹⁷⁰ Pluto becomes eager to sacrifice, save waste fats, and take them to his meat dealer, after he looks over at a photograph of Mickey Mouse wearing an army uniform. In addition to cartoons such as

¹⁶⁴ Poster 39, *Our Food is Fighting*, Appendix B, pg. 68.

¹⁶⁵ Poster 40, *Keep ‘em Clean*, Appendix B, pg. 68.

¹⁶⁶ *Ibid.*

¹⁶⁷ Lee, *Promoting the War Effort*, 100.

¹⁶⁸ Dave Bossert, “Saving Bacon Fat and Meat Drippings: The Disney Way”, *Cartoon Research*, February 17, 2018, <http://cartoonresearch.com/index.php/saving-bacon-fat-and-meat-drippings-the-disney-way/>.

¹⁶⁹ *Ibid.*

¹⁷⁰ *Ibid.*

this one, war posters asked women to strain waste fats into clean cans, store the cans in a cool, dark place, and after roughly a pound has been saved, to take them to their local meat dealer in exchange for payment.

Thus, housewives were asked yet again, to do their patriotic duty, bringing waste fats to their local meat dealers. In poster 41, *Save Waste Fats for Explosives*,¹⁷¹ a woman's hand lets the grease from a frying pan pour into the center of the image, through which explosives and bullets fly out toward the viewer. This poster illustrates a story for how the viewer's actions on the home front can help to create explosives, connecting them to the war through waste fats. While this image uses very little text, the message is delivered with a bang!

Additionally, grease and waste fats are shown harming the enemy in two violent WWII posters. In poster 42, *The Grease You Save...*, a chubby Hermann Goring, a member of the German Nazi party and commander in chief of the German air force in WWII, is depicted as a cartoon with a very round face and large hands. Hermann is wearing his German uniform as he tries to run away from the hot grease being poured from a larger than life frying pan onto his back. The use of grease in this image, shows the viewer a very direct relationship between food and the war effort and states the grease saved "will burn t... off Hermann!".¹⁷² The grease spill covers the middle of this expression, allowing the viewer to fill in the blank however they see fit. This poster portrays a semi-violent, but perhaps slightly humorous relationship between kitchen grease and beating the enemy. In poster 43, *Save Fats*, the relationship between waste fats and the enemy is extreme in both imagery and text. This poster dehumanizes America's enemies during WWII, as the enemies from Japan, Italy, and Germany have human caricature faces placed onto rat bodies. The poster text reads "save fats, help kill these rats",¹⁷³ and for each rat in the image, a woman's hand pours the hot waste fats from a frying pan onto the enemies, whose faces are shown grimacing. These posters used the enemy to inspire women to contribute a very useful ingredient at the time, grease waste, to their local meat dealers. While declaring that saving a pound of waste fats will help to beat America's enemies was largely a rouse, these posters attempt to showcase small actions from kitchens having a large impact on the war's outcome.

Over the span of four years, American consumers were asked to conserve food for the war effort. In the fourth year of war, poster 44, *A Message about Food from the President of the United*

¹⁷¹ Poster 41, *Save Waste Fats for Explosives*, Appendix B, pg. 69.

¹⁷² Poster 42, *The Grease You Save...*, Appendix B, pg. 69.

¹⁷³ Poster 43, *Save Fats*, Appendix B, pg. 69.

States, was released displaying a statement from President Truman. Hoping to keep up food conservation efforts and to “*help increase the nation’s food supply*”, President Truman asks Americans to grow victory gardens, to preserve food, and to conserve food “*in every possible way*”.¹⁷⁴ President Truman declared that American food “*will make a real contribution to the final victory and the peace*”.¹⁷⁵ The president's words in this simple poster are used to urge citizens to continue conserving food because “*there can be no lasting peace in a hungry world*”.¹⁷⁶ Yet, as WWII ended, food posters began to disappear from the lives of American consumers. Thus, the U.S. government’s use of poster propaganda to influence food behaviors among Americans during both world wars can now be summarized.

¹⁷⁴ Poster 44, *A Message About Food From the President of the United States*, Appendix B, pg. 69.

¹⁷⁵ *Ibid.*

¹⁷⁶ *Ibid.*

Chapter 5: Changing Food Behaviors

“...seen, remembered, understood, and acted upon...”

Terence H. Qualter, 1962

Posters were one of many vehicles used to promote the need for food conservation throughout both WWI and WWII. Of the 44 posters presented in this study, 21 were created during WWI and 23 were created during WWII. Throughout this thesis, each poster’s text and imagery was examined for the messages told about food and food behaviors. Using secondary data, food conservation messages were better understood by examining the social, political, or financial context of the time in which they were created. The following section discusses how food conservation posters brought food waste into people’s lives and answers the following research questions: (i) What motivated the U.S. government to create food posters during WWI and WWII? (ii) Which food behaviors were targeted in WWI and WWII food posters and what methods were used to influence consumers? (iii) How might the targeted food behaviors create habits which result in less food waste during times of war and times of peace?

While the overarching, and perhaps obvious, motivation for creating posters was the U.S. declaration of war, the need to conserve food came about for multiple reasons. In both world wars, the U.S. pledged to feed European citizens and to help feed Allied forces. U.S. food aid has since faced criticism, particularly after the end of WWII. However, pledging to provide food aid during the wars required the U.S. government to manage agricultural resources, food production and distribution, food prices, and consumer food behaviors on an unprecedented scale.

In WWI, Herbert Hoover did not want to mandate rationing, thus spurring a very specific food conservation campaign. Hoover took a great leap of faith in the American public, believing that Americans would alter their food behaviors in such a way as to ensure others could get enough to eat and food could be redistributed overseas for the war effort, all voluntarily. Therefore, many WWI food posters were created to avoid government-mandated rationing. Instead, the U.S. government created WWI posters to keep Americans in the loop on what to eat and how to manage their diets. Additionally, throughout the 19 months the U.S. was fighting in WWI, varying environmental conditions created difficulties in asking consumers to alter their diet. While reducing consumption was necessary, offering the American public alternatives was challenging, because crop yields were difficult to predict throughout the seasons. These difficulties may have

played a role in motivating the government to produce these poster images. Rather than attempting to inspire food conservation through voluntary action, government-mandated rationing would control food consumption in WWII.

In WWII the motivation to create food posters was based on an entirely different social, economic, and political system. While the U.S. pledged to provide food aid again during WWII, the U.S. had been through a difficult decade, with high unemployment and hunger throughout the Great Depression. Thus, fear of inflating prices and a desire to keep living costs manageable during the industrial boom required the OPA to institute point rationing. The context of mandating rationing in WWII required a different approach to food conservation posters. Posters were created to justify why rationing was necessary and help placate irritated consumers. Additionally, WWII posters had to be directed to audiences differently. Gender roles were changing as more women worked outside of the home, and nearly 16 million men and women enlisted in the armed forces during WWII. Therefore, food waste in military canteens became an important focus for food conservation. In order to save costs and ensure that less was being wasted, the Army and Navy created their own poster campaigns, putting more responsibility on soldiers to make sure that home front efforts were not going to waste in military canteens. If Americans on the home front were sacrificing for soldiers to get enough to eat, soldiers needed to not waste that food. Thus, providing food aid, rationing, and managing waste in military canteens motivated various U.S. governmental departments to create food conservation posters during WWII.

From the 44 posters presented in this study, six major food behaviors were present, including reducing consumption, using alternatives, canning food, not throwing food away, food rationing, and recycling waste fats. WWI food posters focused heavily on asking consumers to reduce their consumption of specific foods including meat, wheat, and sugar. While meat and wheat were the most needed in Europe, sugar was targeted because importing sugar from the Caribbean required ships, which the U.S. government needed for the war effort. Reducing consumption was often asked through the slogan “Eat Less, Waste Nothing”. Citizens were asked to eat less in order to avoid food shortages when crop yields were low and because food needed to be shipped overseas, leaving less to be distributed equally on the home front. Thus, WWI posters presented alternatives which the American public could use instead of sugar, wheat, and meat. Food alternatives, such as syrup, molasses, corn meal, cottage cheese and fish were promoted as being cheaper and nutritionally beneficial. Additionally, posters told consumers where to find

recipes for cooking with war-friendly foods, thus helping consumers alter their food behaviors. While reducing consumption and using alternatives were two of the predominantly promoted food behaviors in WWI, not throwing food away and canning food are two food behaviors which were targeted in both WWI and WWII posters.

During both world wars, Americans were asked to avoid food waste and to preserve food. Reducing food waste became a central request across food conservation posters. In addition to targeting specific food behaviors, avoiding food waste was found repeatedly across the 44 posters presented in this thesis. Slogans such as “don’t waste it” or “waste nothing” were used throughout WWI and WWII food conservation posters. While some posters did not offer specific instructions to assist consumers in reducing food waste, American citizens were asked to be aware of how much food ended up in the garbage can. One method for keeping food out of the garbage cans was to ensure food would last long enough to be consumed before spoiling. Therefore, preserving food through canning was a key food conservation behavior, which allowed consumers to stock foods in their home, creating a feeling of security while avoiding waste.

Food conservation was promoted in both world wars, but WWII food posters emphasized different food behaviors. Rather than asking consumers to reduce consumption voluntarily, rationing was implemented to ensure the consumption of necessary war foods would be limited. Thus, rationing posters asked consumers to follow rationing guidelines and persuaded consumers that rationing was necessary and beneficial. As rationing was mandatory, growing victory gardens and canning were promoted as options to bolster the diet. Additionally, WWII posters promoted salvaging food waste and specifically detailed how to separate waste. Although salvaging food waste did not reduce the amount of food being wasted in the first place, WWII posters explained how waste fats and edible food waste could be used to make explosives or animal feed. Thus, certain food items were shown to continue having importance as a resource, even when considered waste.

A variety of methods were used throughout WWI and WWII posters to influence or persuade Americans to alter their food behaviors. First and foremost, many posters were created for a specific audience. Although posters were aimed at children, men and soldiers, and immigrants, the majority of food conservation posters spoke directly to women. Particularly in WWI, Hoover’s efforts to mobilize women into the domestic science movement required creating posters which women could not ignore. Socially constructed gender norms were used to persuade

American women that food conservation was their responsibility. Housewives were asked to integrate food conservation behaviors into their domestic tasks, such as shopping, cooking, and preserving foods. In WWII, soldiers were asked to conserve food, as the U.S. Navy and Army displayed food posters in military canteens. While consumers on the home front were asked to conserve food, soldiers were reminded it was also their duty not to let these foods go to waste. By targeting specific audiences, war posters brought food conservation to specific groups who would be essential in reducing food waste on the home front and in military canteens.

Secondly, WWI and WWII posters appealed to viewers' emotions through a combination of text and imagery. Food posters attempted to create feelings of guilt, by depicting desperation, starvation, and tragedy. Food posters portrayed images of starving people and used text to describe the suffering and death of others, thus equating wasting food with letting others perish from starvation. Many posters attempted to highlight how an individual's food behaviors on the home front would impact the war effort or the lives of other people. Thus, food posters asked viewers to alter their actions, in order to reduce the suffering of others. While posters inspired guilt, many posters also told viewers that food conservation actions, although small, would make a big difference, thus offering people an outlet to ease their guilt.

Next, food posters attempted to make food conservation efforts appear patriotic and normal. Food conservation was promoted as a patriotic duty, and Americans were called to action by phrases such as 'do your share' and 'join the ranks'. Additionally, important American figures such as American Presidents, military generals, or Uncle Sam were depicted both in imagery and text, urging consumers to conserve food. Not only was food conservation promoted as a patriotic duty, but multiple posters showed others sacrificing for the war effort and conserving food happily and easily. Posters portrayed characters, who appeared to be ideal Americans, performing food conservation behaviors, thus creating social pressure to join the war effort. Individuals were pressured to alter their food behaviors or risk being shamed, as food conservation became a solution to winning the war.

Lastly, food conservation was portrayed as a vehicle for violence. Food posters asked consumer to alter their food behaviors because food was a weapon, which could not be wasted. In WWI, Americans were told that food was ammunition and both canning and eating less wheat were depicted as solutions to beat the enemy. In WWII, food was personified and posters declared 'our food is fighting'. Consumers were asked to save waste fats, which would be used to make

ammunition and explosives, and posters portrayed enemies being killed or harmed by waste fats from frying pans. Therefore, consumers may have been inspired to conserve food and save waste fats, as their patriotic duty, because conserving food was key to winning the war. Although the idea that food would fight or food conservation would win the war alone was illogical, food and food conservation were depicted as extremely important to the war effort. Thus, Americans could support the war effort and feel patriotic by altering their food behaviors.

Of the six food behaviors which were targeted throughout WWI and WWII, some specific behaviors could have more easily become habits. First, canning food and learning proper food preservation techniques were skills which could be used outside of the context of war, particularly to save money or remain semi self-sufficient. The domestic science movement used education to improve kitchen management across the nation, leaving educated women in charge of planning, shopping, preparing, serving, and storing food after the wars ended. Being asked to use alternatives during WWI and creatively prepare meals with rationing during WWII instigated a movement of cookbooks based on food alternatives and using leftovers. What may have felt like limitations could have actually led to more creative food planning and preparing skills, breaking the traditional model of cooking, serving, and storing foods. Additionally, continuously asking Americans to consume less or waste less may have made more people conscious of how much food they were eating and how much food they were wasting. By using images of trash cans and plates across different types of food conservation posters, these vehicles for eating and wasting food became more present in conversation and perhaps consciousness.

However, some targeted behaviors from WWI and WWII food posters would have been less likely to translate into sustainable habits. Because the overarching justification and motivation for conserving food was the war, many of the food behaviors specifically connected to the war effort were more easily left behind as WWII ended. While consumers had to use their ration coupons during WWII, the desire to be able to purchase limitlessly could have been a catalyst for overconsumption after the war ended. Posters which justified rationing only applied to the specific context of mandated rationing during WWII, and therefore, the idea behind rationing, or consuming less so others can have enough, was not well integrated into Americans actions. Additionally, recycling waste fats into glycerin required meat dealers to collect waste fats, which needed to be transported to factories making ammunition. However, after the war ended, ammunition factories were converted into factories making commercial goods. Thus, even if

individuals wanted to continue salvaging and donating waste fats, the ability to do so quickly disappeared. Similarly, the idea and the slogans that food is a weapon and that food will win the war, were also irrelevant as the war ended. Therefore, the call to conserve food during WWI and WWII may have temporarily inspired American citizens to alter their food behaviors. Yet, after the wars ended food conservation was no longer promoted and the justification for conserving food was gone. Instead, consumers had been asked to sacrifice and to limit their consumption only to be able to consume endlessly post WWII.

Food was portrayed as a weapon, as a solution to both war and madness, and ultimately, as a useful resource which need not be wasted. As we look for solutions to reduce food waste in the twenty-first century, exploring how food behaviors and food conservation have been promoted and managed in the past can provide insight. Today, food waste research has highlighted that the lack of knowledge surrounding food planning, preparing, and storage are major contributors to food waste. Although the education taught through the domestic science movement was heavily gendered, women were equipped with the education necessary to reduce food waste for the conservation effort. Food management education should not be taught only to women, but instead, all individuals should be equipped with the necessary education to manage food and reduce food waste. These skills are valuable outside of war and are equally important in times of peace. Additionally, while rationing was justified to keep prices low and ensure an equal distribution of goods, rationing took away the individual's freedom of choice in how much to purchase and consume. Yet, rationing created an environment where frugality and thriftiness were normalized, which could have left a lasting impression on the importance of avoiding waste. Finding ways to inspire frugality and thriftiness across America today could play a large role in reducing food waste.

The U.S. government's efforts to inspire food conservation meant that consumers were surrounded by food posters. Throughout these posters, Americans were asked to shop and cook wisely, to follow nutritional guidelines, to produce or preserve fruits and vegetables, and to watch their waste. Food waste was made visible and consumers' food behaviors were challenged. Thus, while food habits have been found to develop largely unconsciously today, the presence of food conservation posters throughout WWI and WWII forced consumers to engage with their food behaviors consciously. As food conservation posters and food scarcity disappeared for many Americans, food waste became less visible. Thus, posters made in times of peace could be used to

remind consumers that food is a valuable resource and to encourage individuals to engage with their food behaviors consciously.

While the war poster was used to explore food behaviors in this thesis, further research should expand beyond the poster. The war poster is only one point of departure into the study of war and consumption and additional data sources would reveal a more in-depth analysis of food's role during the war and how consumers were instructed to conserve food. War propaganda was disseminated through nearly every channel possible including radio shows, newspaper and magazine articles, music, toys, brochures, and leaflets and cookbooks played a large role in giving housewives solutions for using less common ingredients. Additionally, cookbooks promoted using leftovers more efficiently, which could be useful to study and promote today. WWII saw a different use of propaganda, with the introduction of the TV and film, therefore, TV shows, commercials, and movies could also be explored for food conservation discourse. Additionally, expanding this inquiry beyond the household and into American restaurants, grocery stores, and farms, as well as examining agricultural policies, could reveal a more thorough discourse surrounding food and food conservation during WWI and WWII. This, however, was beyond the scope of this thesis, which aimed to present a foundation for food conservation efforts through one uniform vehicle, the poster.

Although these posters were created during times of war, food conservation is just as relevant and necessary during times of peace. Today the U.S. is characterized by an abundance of food, which became a symbol during WWI and WWII, as the U.S. provided food aid to European countries suffering under the thumb of war. WWII was the last large scale and mass organized effort the U.S. government made to inform individual's food consumption and ask Americans to conserve food in order to provide food aid. Yet, there are still roughly 795 million people who do not have access to enough nutritious foods today, 40 million in the U.S. alone. Therefore, while this thesis examined the government's attempt to alter food behaviors in the past, it also begs the question, do we not have an obligation to alter our behaviors today in order to salvage calories from being wasted in a nation of abundance? Does the U.S. government not have a responsibility to ensure the equitable distribution of food across its own nation? What role could the U.S. government play in asking consumers to alter their food behaviors in order to better redistribute foods to those who are in need of them today? These are all questions which, I hope, will be addressed by future research and discussion across academic disciplines.

While it is time for this thesis to end, my journey to better understand the food waste phenomenon has really only begun. As nearly 40 percent of food goes to waste in the U.S., I wonder how food conservation campaigns could be tailored to the context of the twenty-first century. My journey to better understand the food waste phenomenon began in 2014, as I picked perfectly good tomatoes and apples from dumpsters. This led me back in time to explore how the U.S. government brought food conservation to the table. Throughout this journey, I learned that our relationship with food has not always been and does not need to be one of carelessness and waste. While the context in which food conservation posters were created is one of the past, the messages about food and consumption hold valuable lessons for inspiring consumers to reduce food waste today.

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Appendix A

Table 2. Poster Titles and Full Text. Poster text is included with the same capitalization and italics used in the poster image. Some punctuation was added to distinguish between separate sections of text.

<p>01. Keep the Wolf From Our Own Door</p>	<p>We Must Conserve Food To Keep the Wolf from Our Own Door. Scarcity of food is exacting greater death toll and causing more intense suffering in Europe than bullets. This frightful, unprecedented predicament of starving millions of allied families SOUNDS a solemn warning to America. Appalling Conditions Threaten America If We Waste Our Foods. Our supply of food is only so much and now five or six other countries are depending on us to feed them that they may live and fight. The authorities merely request that you eat- ONE POUND LESS OF WHEAT FLOUR A WEEK-which means one hundred and thirty-three million bushels of wheat more annually for emergency or two thousand million loaves of bread: ONE OUNCE LESS OF MEAT A DAY-which means four million hundred thousand meat animals each year for excess demands: ONE OUNCE LESS OF SUGAR A DAY-which means one million one hundred and eighty-five thousand tons of sugar a year, making it plentiful and cheap: ONE-THIRD OF AN OUNCE LESS OF FATS A DAY-which means three hundred and ninety-five thousand tons more fat each year from which to make glycerine, used for manufacturing explosives. Complying with this request from today on will materially help to win the war and Prevent the Government from Issuing Food Restriction Orders. Do not buy more food than you actually need-then the dealer will not have to “stock up”-and the wholesaler will have enough to go around. Less Eating Will Save Many a Pain and Doctor Bill. A Little Saved Today Will Mean Square Meals Next Year. You Owe the Duty of Saving Food to Your Country and Humanity</p>
<p>02. Be Patriotic</p>	<p>Be Patriotic sign your country’s pledge to save the food</p>
<p>03. The Greatest Crime in Christendom</p>	<p>The Greatest Crime in Christendom. To buy-to cook-to eat more than you need; to waste a single morsel of food that can be used-is a crime. Ten million have died bravely on the field of battle. They at least had a chance. They gave their all willingly and unselfishly. Over twenty million have died of starvation-without even a chance to fight. To these death has come only as a relief from torture worse than death-<i>starvation</i>. It is <i>our</i> job-your and ours-to <i>save food</i> so that the millions of starving people in Europe may have SOMETHING to eat. Eat Less Waste Nothing. Live simply-avoid all food waste. Don’t Waste food</p>
<p>04. An Heroic Sacrifice</p>	<p>I solomonly sware that I won’t eat no more ice creem what’s maid with suger not no more candy what’s maid with suger, honest an troo- cross my hart. Amen! Me too! An Heroic Sacrifice</p>
<p>05. Sir-Don’t Waste While Your Wife Saves</p>	<p>Sir-don’t waste while your wife saves. Adopt the doctrine of the clean plate-do your share</p>
<p>06. Food Will Win the War</p>	<p>Food will win the war. You came here seeking freedom you must now help to preserve it. WHEAT is needed for the allies. Waste nothing</p>
<p>07. Save a Loaf a Week</p>	<p>Save a loaf a week help win the war</p>
<p>08. Patriots</p>	<p>PATRIOTS! USE CORNMEAL. IT CANNOT BE SHIPPED. IT IS SPLENDID EATING. IT IS CHEAPER THAN WHEAT FLOUR. IT SAVES WHEAT. FREE RECIPES INSIDE. GET YOURS</p>


09. Sugar Means Ships	The consumption of sugar sweetened beverages must be reduced. Sugar means Ships. For your beverages 400 million lbs. Of sugar were imported in <i>Ships</i> last year. Every <i>Ship</i> is needed to carry soldiers and supplies <i>now</i> .
10. Eat Cane Syrup & Molasses	Eat Cane Syrup & Molasses. Save sugar by using best LOUISIANA MOLASSES and SUGAR CANE SYRUP
11. Eat More Cottage Cheese	EAT MORE COTTAGE CHEESE. ONE POUND SUPPLIES MORE PROTEIN THAN one pound of beef, or one pound of pork, or one pound of lamb, or one pound of veil, or one pound of fowl. YOU'LL NEED LESS MEAT. A Postal Card Will Bring Recipes for using this meat substitute. COTTAGE CHEESE OR MEAT? ASK YOUR POCKETBOOK!
12. Save the Products of the Land	Save the products of the land. Eat more fish-they feed themselves.
13. Blood or Bread	BLOOD or BREAD. Others are giving their blood. You will shorten the war-save life if you eat only what you need, and waste nothing
14. Keep it Coming	KEEP it COMING. "We must not only feed our Soldiers at the front but the millions of women & children behind our lines" Gen. John J. Pershing. Waste nothing.
15. Don't Waste Food While Others Starve	Don't waste food while others starve!
16. Save Food for World Relief	SAVE FOOD FOR WORLD RELIEF. That crust of bread you wasted-That bit of meat you nibbled and left-That plate of leftovers that are spoiling-Each is small in itself-but the total waste is staggering. You can help. Eat less-waste nothing
17. Food is Ammunition-Don't Waste It	Food <i>is</i> Ammunition-Don't waste it.
18. Defeat the Kaiser and His U-boats	<i>Defeat the KAISER and his U-BOATS</i> . Victory depends on which fails first, food or frightfulness. Eat less WHEAT.
19. Win the Next War Now	WIN THE NEXT WAR NOW. CAN vegetables, fruit and the Kaiser too. Write for free book to National War Garden Commission Washington D.C.
20. 300 Million Hungry People Are Watching Your Plate	300 Million Hungry People Are Watching Your Plate. When you have finished your meal-is there any food left on your plate-did you order or serve yourself more than you needed? In Serbia, Poland, Belgium, Armenia and in other countries thousands upon thousands of people, old and young have starved to death. Although the military victory is now ours, we must, for the safety of the world - to make our victory complete- fight the great spectre of famine that is stalking through Europe. Uncle Sam asks for Simple Living-Clean Plates-No Extra Meal. If you have been thoughtless in your kitchen-at your table-in the restaurant-start with your <i>next meal</i> and do your share in this great reconstruction work. Eat Less waste nothing
21. Don't Let Up	don't let up. Keep On Saving Food
22. A Fair Share For All of Us	RATIONING MEANS A FAIR SHARE FOR ALL OF US
23. Plant A Victory Garden	PLANT A VICTORY GARDEN. OUR FOOD IS FIGHTING. A GARDEN

	WILL MAKE YOUR RATIONS GO FURTHER
24. Do With Less-So They'll Have Enough	Do with less-so they'll have enough! RATIONING GIVES YOU YOUR FAIR SHARE
25. Join the Ranks	<i>Join the ranks</i> -FIGHT FOOD WASTE in the home. <i>Buy</i> to save. <i>Serve</i> to save. <i>Store</i> to save
26. Sugar-Flour-Cereal-Spice	SUGAR-FLOUR-CEREAL-SPICE. Store dried foods in tight containers to keep out moisture, insects, dust, and mice. CANNED FOODS. Food in glass should be kept in a cool, dark place. Light affects color, and vitamins. Store tinned foods in dry place to prevent rust.
27. Milk and Eggs-Nature's Food	MILK and EGGS-NATURE'S FOOD clean, covered, cold...will stay good! Clean milk will keep several days at 40°-45° F. Don't let milk stand at room temperature.... it spoils quickly. MILK-EGG DISHES cool quickly, cover, keep cold, use soon. We're good mixers, You'll find none better but we can be dangerous in hot weather.
28. Fruit You Waste Here...	FRUIT YOU WASTE HERE!MAY PREVENT HIS WOUNDS FROM HEALING THERE! VITAMIN "C" FOUND IN CITRUS FRUITS IS AN AID TO HEALING WOUNDS AND BUILDING TISSUE
29. We'll Have Lots to Eat This Winter, Won't We Mother?	We'll have lots to eat this winter, won't we Mother? Grow your own, Can your own
30. Of Course I Can!	"OF COURSE I CAN! I'm patriotic as can be-And ration points won't worry me!"
31. Can All You Can	CAN ALL YOU CAN. IT'S A REAL WAR JOB!
32. You Were Right Sir!	"YOU WERE RIGHT SIR! THE MEN DO SEEM A LITTLE RELUCTANT TO THROW FOOD AWAY!"
33. Thank You So Much American Soldier	<i>THANK YOU SO MUCH, AMERICAN SOLDIER</i> FOR WASTING FOOD. HELP TO JO WIN WAR
34. Valley Forge	VALLEY FORGE 1778. No one had to tell <i>HIM</i> to save food & equipment
35. You Bite The Hand That Feeds You...	You Bite the Hand That Feeds You... When You WASTE Good Navy Chow
36. Small Fry	SMALL FRY. Think about America's Small Fry-your son or the daughter of your Buddy. When soldiers waste food, they feel the pinch. We aren't fighting this war to give America a lot of rickety, undernourished kids. <i>This is the Army talking</i> . We'll SAVE FOOD and safeguard their future!
37. To Speed Our Boys Home	HANG THIS UP IN YOUR KITCHEN TO SERVE AS A DAILY REMINDER. TO SPEED OUR BOYS HOME! Help shorten the war-save American lives-with a precious fighting weapon-FOOD. Score yourself and your family. Do you do these things to the best of your abilities and opportunities? PRODUCE as much food as you possibly can? On the farm?... In the Victory Garden?... CONSERVE your food? By wasting nothing-cleaning the plate?... By preserving food in your home?... By substituting plentiful for scarce foods?... By serving the right foods for

	strength and health?... SHARE your food? By sharing it willingly with our fighting men and fighting Allies?... By accepting rationing cheerfully?... By buying no more rationed foods than you really need?... PLAY SQUARE with food? By always turning in your stamps when you buy rationed foods?... By paying no more than top legal prices?... FOOD IS THE MIGHTIEST WEAPON OF THEM ALL. FOOD FIGHTS for freedom
38. Food Is A Weapon	FOOD IS A WEAPON DON'T WASTE IT! BUY WISELY-COOK CAREFULLY-EAT IT ALL. FOLLOW THE NATIONAL WARTIME NUTRITION PROGRAM
39. Our Food is Fighting	Where our men are fighting OUR FOOD IS FIGHTING. BUT WISELY-COOK CAREFULLY-STORE CAREFULLY-USE LEFTOVERS
40. Vital War Materials	Vital War Materials from Salvaged KITCHEN WASTE. BONES AND MEAT TRIMMINGS, All unuseable portions, fat or lean. COOKED GREASE When no longer useable for cooking purposes. TRAP GREASE Skim from grease trap lightly. Let stand for six hours, then skim again. EDIBLE GARBAGE Eggshells, kitchen and table waste, except inedible waste. INEDIBLE WASTE Trash, coffee and tea grounds, banana and citrus peels, fish heads and scales. Keep 'Em Separate, Keep 'Em Clean
41. Save Waste Fats for Explosives	Save waste fats for explosives. TAKE THEM TO YOUR MEAT DEALER
42. The Grease You Save...	<i>The GREASE you save... WILL BURN T OFF HERMANN!</i>
43. Save Fats	SAVE FATS HELP KILL THESE RATS
44. A Message About Food From The President of the United States	A MESSAGE ABOUT FOOD FROM THE PRESIDENT OF THE UNITED STATES. In this fourth year of war the need for food is greater than ever before. I call upon every American to help increase the Nation's food supply... <i>By growing larger and better victory gardens and seeing them through to the harvest. By preserving our food at home or in a community canning center. By conserving food in every possible way-wasting not an ounce.</i> Our food will make a real contribution to the final victory and the peace. There can be no lasting peace in a hungry world.

Appendix B

Poster 01



**We Must Conserve Food
To Keep the Wolf from Our Own Door**

**Appalling Conditions Threaten
America If We Waste Our Foods**

**Prevent the Government from
Issuing Food Restriction Orders**

You Owe the Duty of Saving Food to Your Country and Humanity

Small text: Hundreds of food restriction orders have been issued... The wolf is ready to pounce... One ounce less of wheat flour a week... One ounce less of meat a day... One ounce less of sugar a day... One-third of an ounce less of fats a day... Do not buy more food than you actually need... Less eating will save many a pain and doctor bill... A little saved today will mean square meals next year... You owe the duty of saving food to your country and humanity... Approved by the War Relocation Authority... Approved by the War Relocation Authority...

Poster 02



**Be Patriotic
sign your country's
pledge to save the food**

U.S. FOOD ADMINISTRATION

Poster 03



**The Greatest Crime
in Christendom**

To buy—to cook—to eat more than you need; to waste a single morsel of food that can be used—is a crime.

Ten million have died bravely on the field of battle. They at least had a chance. They gave their all willingly and unselfishly.

Over twenty million have died of starvation—without even a chance to fight. To these death has come only as a relief from torture worse than death—starvation.

It is our job—yours and ours—to save food so that the millions of starving people in Europe may have SOMETHING to eat.

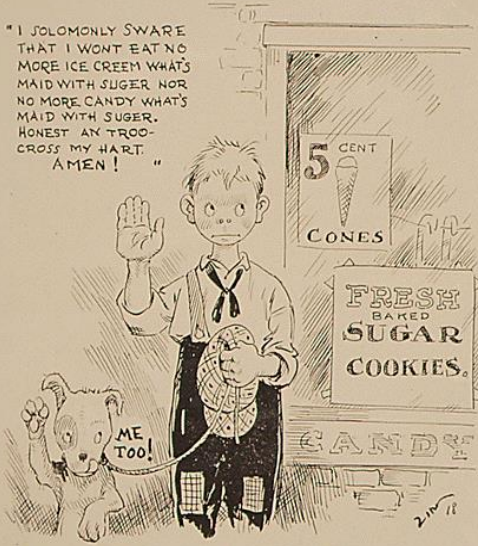
Don't Waste Food

Eat Less Waste Nothing

Live Simply—avoid all food waste.

United States Food Administration
ILLINOIS EDUCATIONAL DIVISION
CHICAGO

Poster 04



"I JOLOMONLY SWARE THAT I WONT EAT NO MORE ICE CREAM WHAT'S MAID WITH SUGER NOR NO MORE CANDY WHAT'S MAID WITH SUGER. HONEST AN TROO. CROSS MY HART AMEN!"

5 CENT CONES

FRESH BAKED SUGAR COOKIES

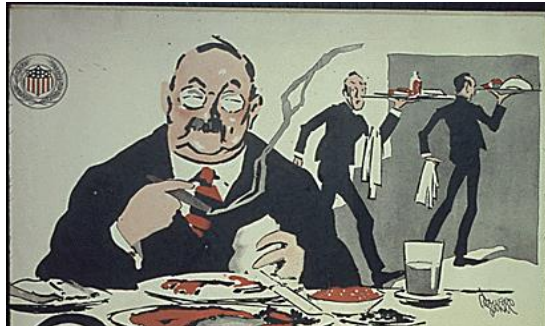
CANDY

ME TOO!

AN HEROIC SACRIFICE.

U. S. Food Administration.

Poster 05



Sir-
 don't waste while
 your wife saves
 Adopt the doctrine
 of the clean plate
 —do your share

UNITED STATES FOOD ADMINISTRATION

Poster 06



FOOD WILL WIN THE WAR
 You came here seeking Freedom
 You must now help to preserve it
WHEAT is needed for the allies
 Waste nothing

UNITED STATES FOOD ADMINISTRATION

Poster 07



**Save a loaf
 a week
 help win
 the war**

U.S. FOOD ADMINISTRATION

Poster 08



PATRIOTS!

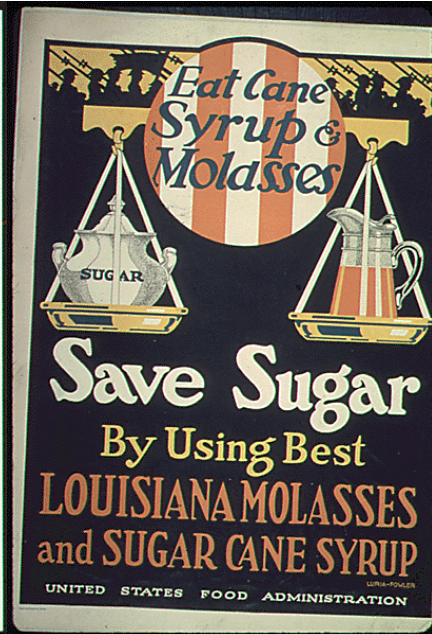
USE CORNMEAL
 IT CANNOT BE SHIPPED
 IT IS SPLENDID EATING
 IT IS CHEAPER THAN WHEAT FLOUR
IT SAVES WHEAT
 FREE RECIPES INSIDE
 GET YOURS

U. S. FOOD ADMINISTRATION — NEW YORK FEDERAL FOOD BOARD

Poster 09



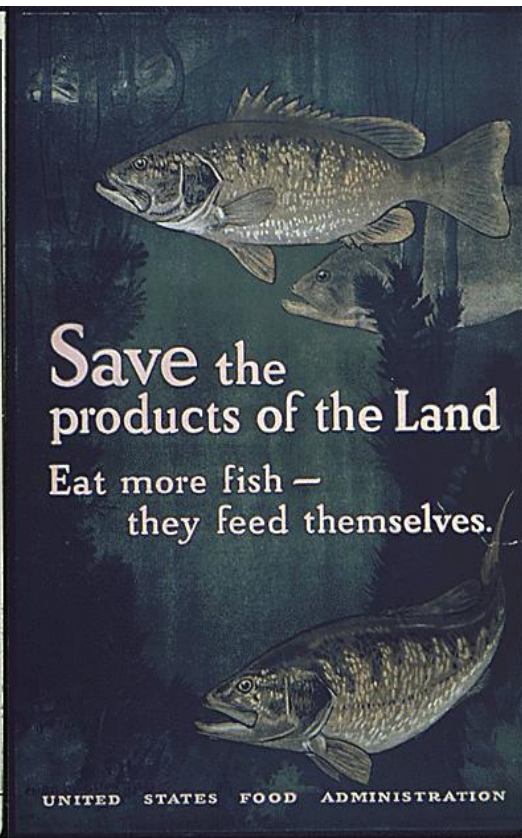
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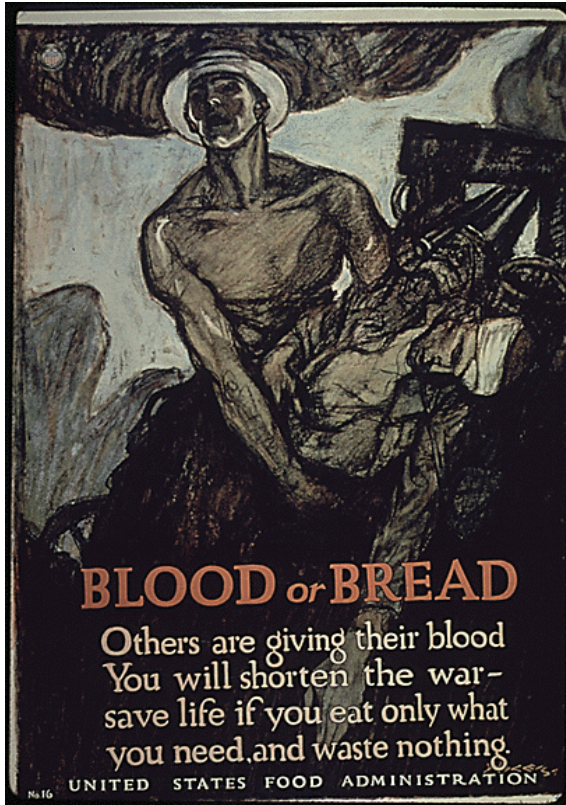
Poster 11



Poster 12



Poster 13



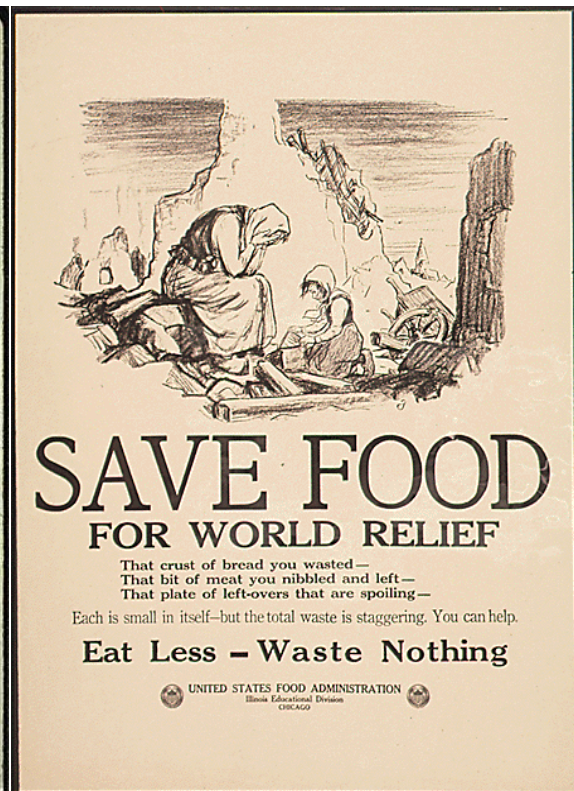
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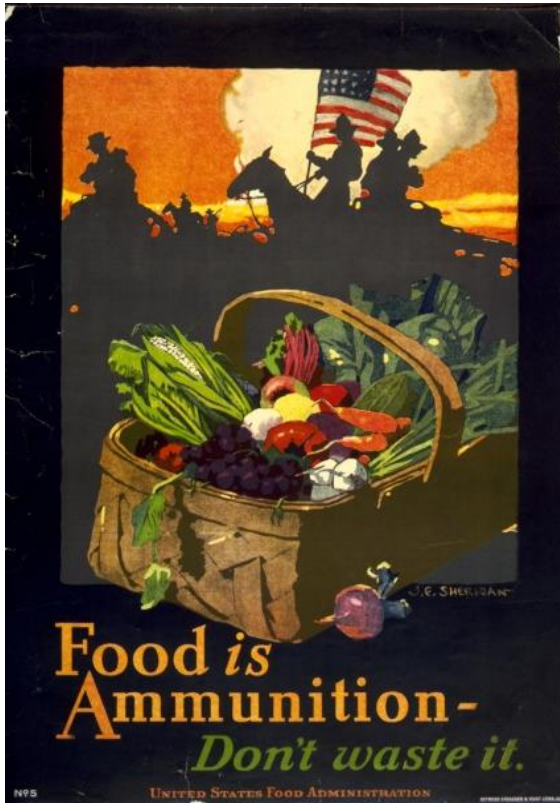
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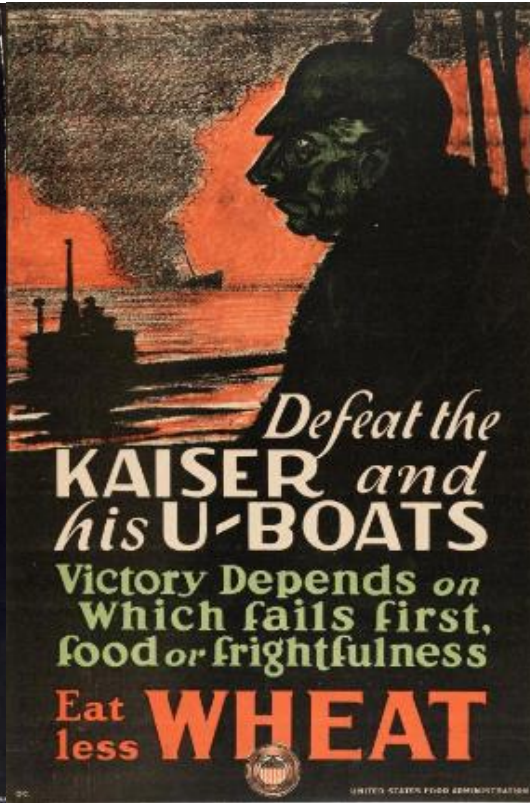
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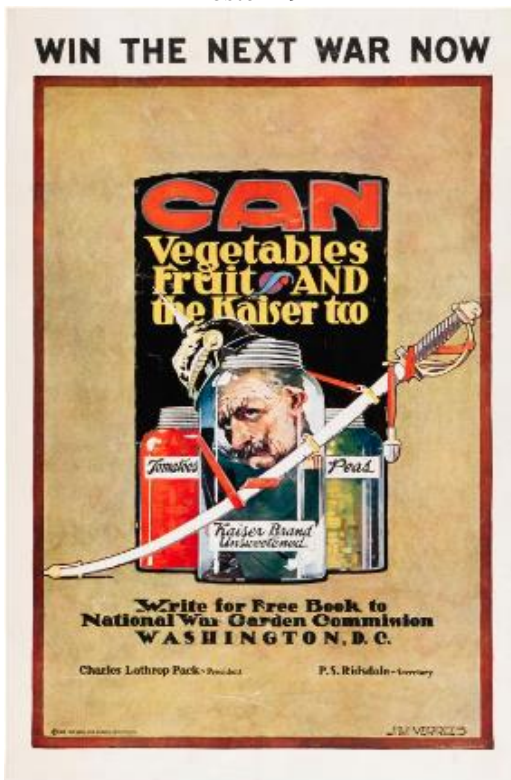
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Poster 18



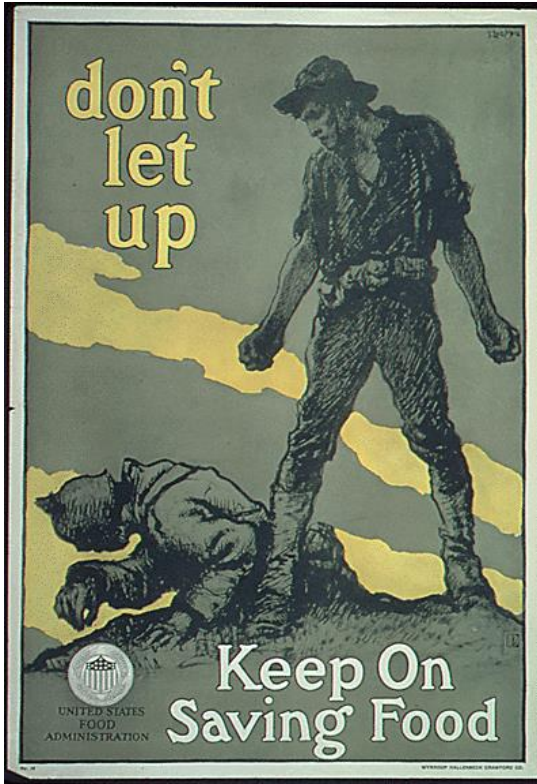
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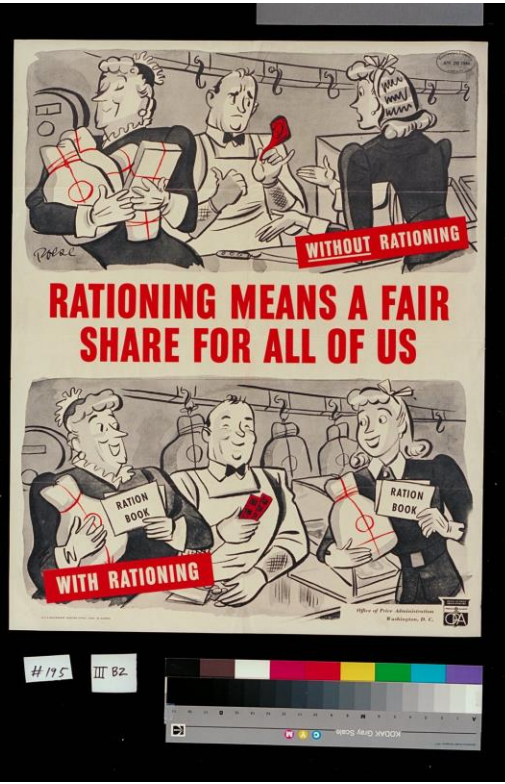
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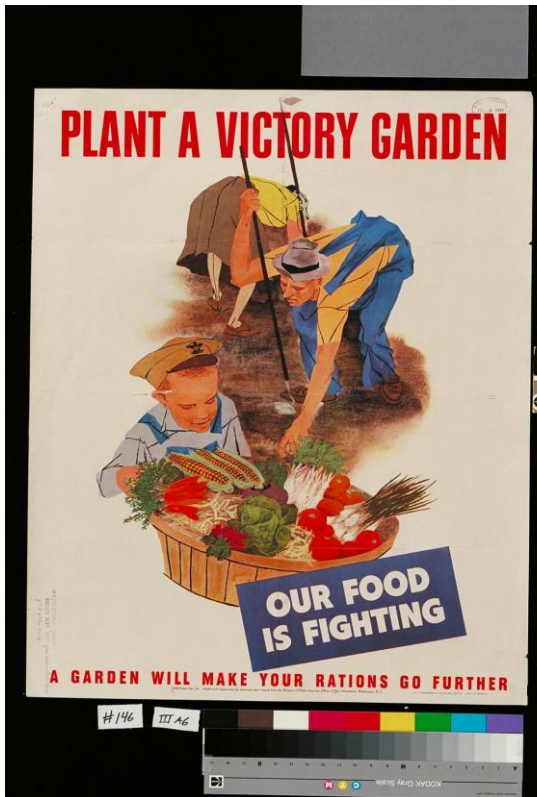
Poster 21



Poster 22



Poster 23



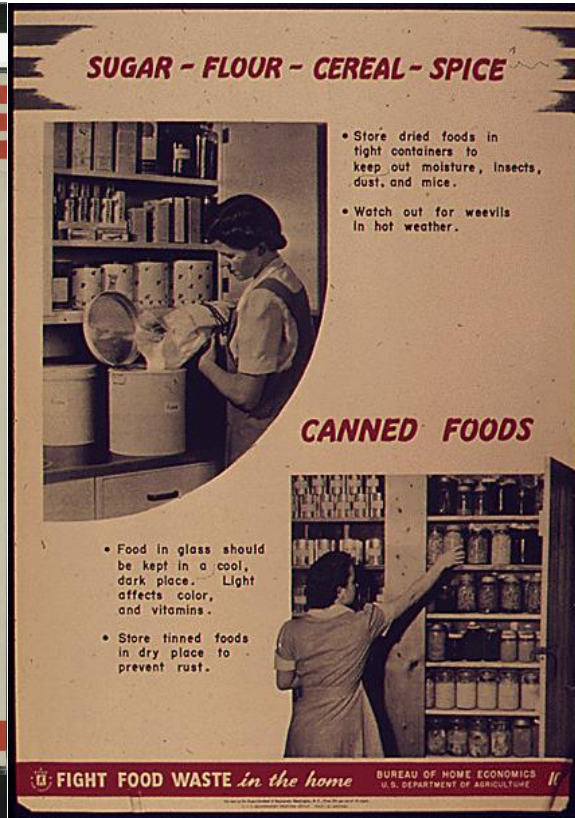
Poster 24



Poster 25



Poster 26



Poster 27



Poster 28



Poster 29



Poster 30



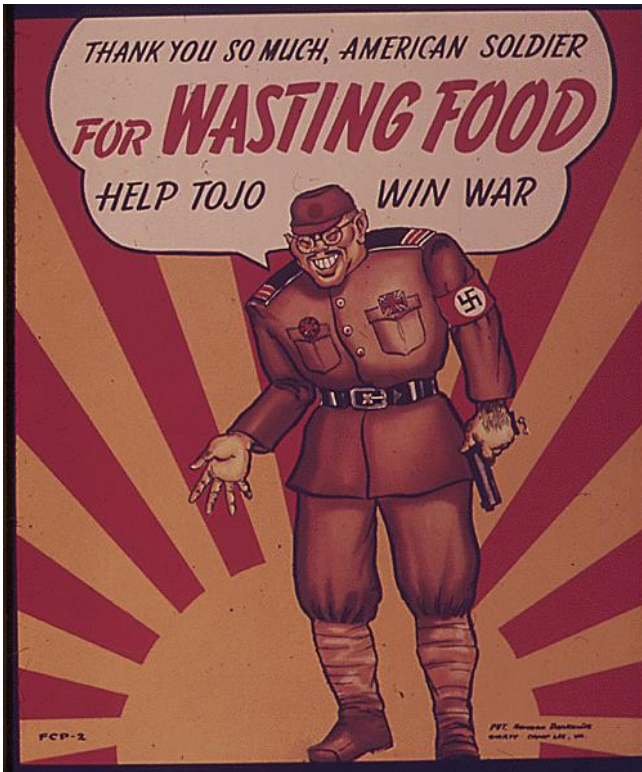
Poster 31



Poster 32



Poster 33



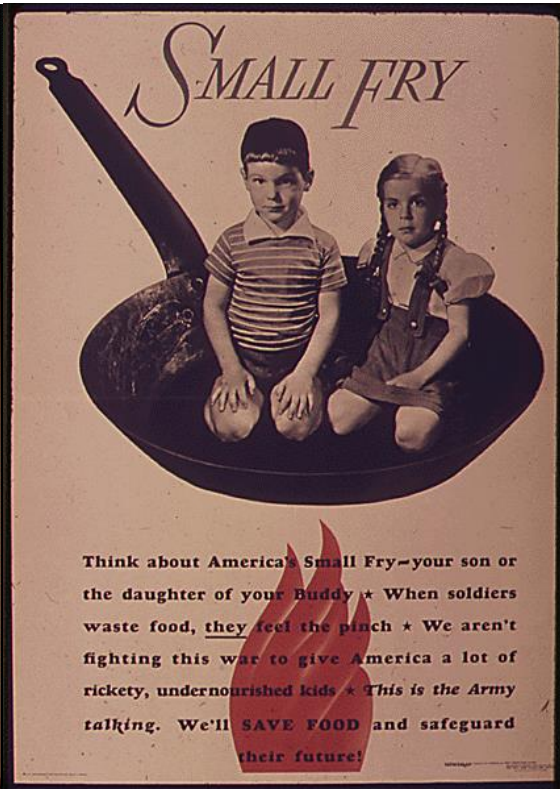
Poster 34



Poster 35



Poster 36



Poster 37

HANG THIS UP IN YOUR KITCHEN ○ TO SERVE AS A DAILY REMINDER



TO SPEED OUR BOYS HOME!

Help shorten the war—save American lives—
with a precious fighting weapon—FOOD

Score yourself and your family. Do you do these things to the best of your abilities and opportunities?

<p>PRODUCE as much food as you possibly can?</p> <p>On the farm?..... <input type="checkbox"/></p> <p>In the Victory Garden?..... <input type="checkbox"/></p>	<p>SHARE your food?</p> <p>By sharing it willingly with our fighting men and fighting Allies?..... <input type="checkbox"/></p> <p>By accepting rationing cheerfully?..... <input type="checkbox"/></p> <p>By buying no more rationed food than you really need?..... <input type="checkbox"/></p>
<p>CONSERVE your food?</p> <p>By wasting nothing—cleaning the plate?..... <input type="checkbox"/></p> <p>By preserving food in your home?..... <input type="checkbox"/></p> <p>By substituting plentiful for scarce foods?..... <input type="checkbox"/></p> <p>By serving the right foods for strength and health?..... <input type="checkbox"/></p>	<p>PLAY SQUARE with food?</p> <p>By always turning in your stamps when you buy rationed foods?..... <input type="checkbox"/></p> <p>By paying no more than top legal prices?..... <input type="checkbox"/></p>

FOOD IS THE MIGHTIEST WEAPON OF THEM ALL



WAR FOOD ADMINISTRATION

Poster 38

FOOD IS A WEAPON



DON'T WASTE IT!

BUY WISELY - COOK CAREFULLY - EAT IT ALL

FOLLOW THE NATIONAL WARTIME NUTRITION PROGRAM

U.S. OFFICE OF WAR RELIEF AND RECONSTRUCTION ADMINISTRATION

IX 19 #253

Poster 39



Where our men are fighting

OUR FOOD IS FIGHTING

BUY WISELY - COOK CAREFULLY - STORE CAREFULLY - USE LEFTOVERS

III D 25 #190

Poster 40

Vital War Materials from *Salvaged* KITCHEN WASTE



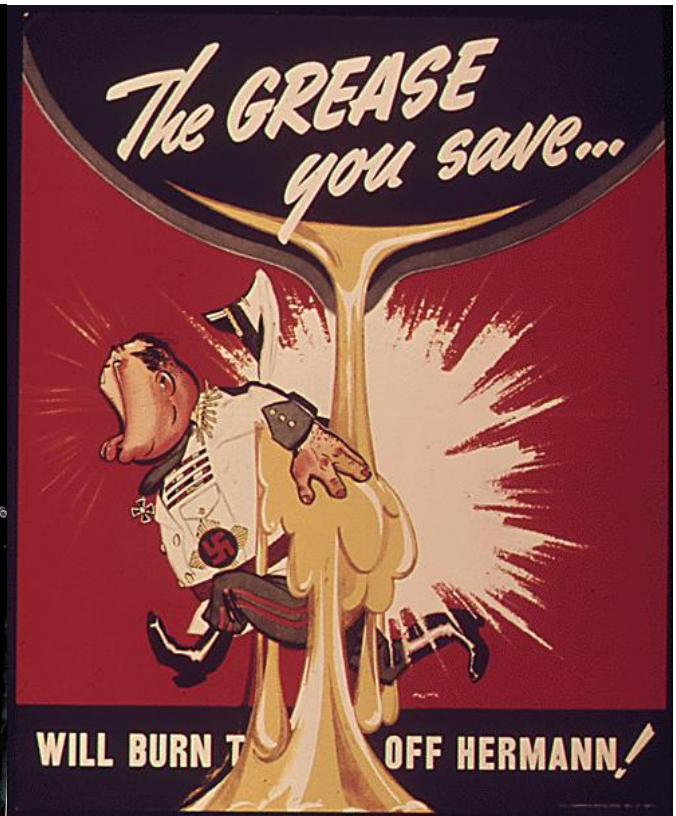
<p>BONES AND MEAT TRIMMINGS All unusable portions, fat or lean</p> <p>COOKED GREASE When no longer usable for cooking purposes</p> <p>TRAP GREASE Skim from grease trap lightly. Let stand for six hours, then skim again</p> <p>EDIBLE GARBAGE Eggshells, kitchen and table waste, except inedible waste</p> <p>INEDIBLE WASTE Trash, coffee and tea grounds, banana and citrus peels, fish heads and scales</p>	 <p><i>Keep 'Em Separate Keep 'Em Clean</i></p> <p>SAVE</p>
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THIS POSTER WILL BE DISPLAYED IN KITCHENS ONLY

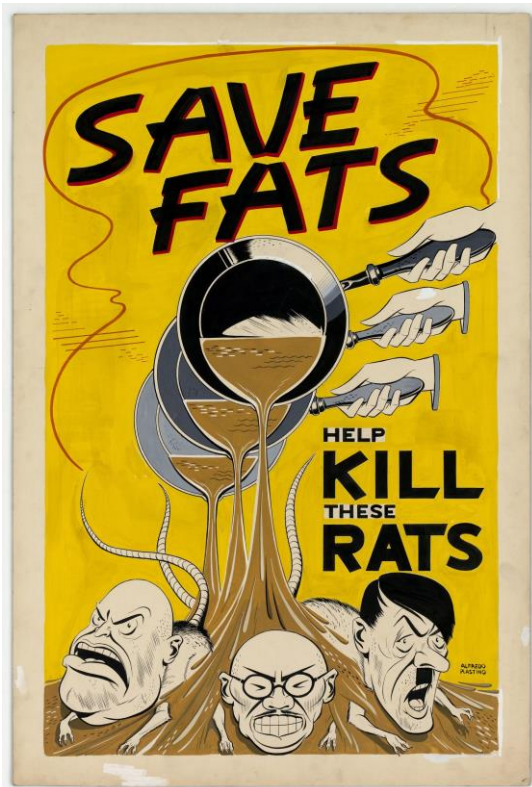
Poster 41



Poster 42



Poster 43



Poster 44

