The Kitchen Soldiers of St. Louis County:  
War, Food Conservation and the Housewives of Duluth Minnesota  
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Abstract

Food conservation was a major concern in WWI and WWII and the United States took on a commitment to supply countries overseas with food placing a strain on American citizens. The housewives of the U.S. were a group singled out by government administrators as having the capacity to help control food consumption and to in a sense help win the wars. The housewives of Duluth specifically took on this role of home front soldier and organized to create community gardens and implement food institutes with education of food preservation. Their commitment to the war gained them and the city national recognition in WWI and Duluth became a leading city in WWII for food conservation practices. This paper uses the Duluth News Tribune to analyze how the housewives were affected by the food restrictions of war.

Introduction

Food conservation, food substitutions and food preservation were used, by the United States government as defense tactics on the home front during World War I (WWI) and World War II (WWII). Because of the commitment the US made to foreign countries (France, Britain, Italy, Russia) during both wars to be an ally, and to supply war goods and food to the allied forces, America faced demands for food that it had never seen before. Both Presidents Woodrow Wilson and Franklin Delano Roosevelt respectively expressed confidence that through conscious food conservation the U.S. could feed and sustain its own communities at home as well as the ones it had promised abroad. The role of women, who were generally responsible for the purchasing and cooking of food, was emphasized during both wars as being the ones who could secure any potential food crisis on the home front.

1 “Shortage of Food Is Feared,” Duluth News Tribune (Duluth, MN), May 2, 1943
Both Administrations wanted the housewives to understand that they had a crucial role to play in winning the war. With access to the archives of the Duluth News Tribune, this paper looks to answer the question of how the housewives of Duluth acted towards and responded to the pleas for food conservation. With a strong sense of patriotic duty, sometimes referring to themselves as “Kitchen Soldiers” and their homes “Kitchen Fronts”\(^2\), the Duluth housewives unified to create local and state women’s organizations as well as institutes for the further education of food conservation and preservation methods, they also grew gardens and shared recipes. Through their conservation efforts, these women became national examples of how to successfully carry out government requests during war and rationing.

**The First World War**

Leading up to WWI, Duluth was in the midst of an industrial boom. The late 1800’s and early 1900’s were a time of major development in Duluth.\(^3\) There was high production of lumber and iron ore, and the opening of Lake Superior Shipping solidified the area as a major port town.\(^4\) Wheat was one of Minnesota’s major crops.\(^5\)

When WWI did begin in 1914, President Wilson expressed his belief that it was important to support France, Britain, Italy and Russia (Allied Forces) against Germany (Central Forces)\(^6\) by supplying those allied countries with food and war products. Because white flour, canned meats and other less perishable foodstuffs were being sent overseas the government suggested voluntary food conservation among American citizens.

\(^2\) “Make the Most of That Meat,” *Duluth News Tribune* (Duluth, MN), February 11, 1943

\(^3\) Macdonald, *Duluth*, Through industrialization, the creation of railroads and access to the lake, Duluth became a major port town, exporting wood and iron ore and becoming the third largest city in the state.\(^3\)

\(^4\) Radizilowski, *Minnesota*, 102-104. Lake Superior has canal access to the other great lakes and shipping between New York and Duluth became a regular means of exporting.

\(^5\) Radizilowski, *Minnesota*, 102

\(^6\) https://en.wikipedia.org/wiki/Allies_of_World_War_I
The President was adamant that there was no need for the American population to fear food shortages as long as they were making sacrifices. Beef, pork, dairy, wheat and sugar were all products that were given first priority to soldiers and allies abroad, and the American public was asked to conserve them, especially as the production of these products continued to decline. Flour (wheat) was used to make bread, which was an easy food to get in large quantities and to transport. Meat, especially pork was best kept when cured and could be saved for future use. Pork fat and ham were also products that could withstand shipment overseas. Sugar was the only stimulant allotted to the soldiers to help promote energy and keep up morale. As the war progressed a strain began to be placed on food production in the U.S. Prices for in demand food products like wheat and sugar were rising and the country was on the verge of a crisis.

In December of 1916, a bill was proposed to the New York Senate to form a new food council to coordinate between the food producers and farmers to create fixed prices. New York State Senator Charles W. Wicks presented this bill on December 20, 1916 stating that, “The department will include a bureau for gathering and publishing reliable statistics as to the quantities and prices of food products which are produced, stored and sold in the state,” and that the new department would “provide an abundant supply of pure and wholesome food, to prevent frauds and oppression in the traffic thereof, and to eliminate waste and loss of distribution”.

The United States officially declared war on Germany in April of 1917 and entered the war in a physical sense with armed forces. It was then that President Wilson once again appealed to the American people in regards to food conservation, “We must supply abundant food for ourselves and for our armies, and for a large part of the nations with whom we have now made a common

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7 “Food Aids In World War,” Duluth News Tribune (Duluth, MN), May 19, 1918
cause...Without abundant food the whole great enterprise upon which we have embarked will break down and fail.\textsuperscript{10}

Access to food overseas continued to grow more difficult, as the President of the Guarantee Trust Company, Charles H. Sabin reported when he returned from Europe in early 1917. His reports were that the French soldiers did not have access to enough of the food and supplies they needed to stay strong.\textsuperscript{11} It was during this time that Herbert Hoover, an administrative officer, was also encouraging the need for food reform, he believed there was not a need to fear shortages but that without proper management, prices would continue to rise, especially for flour and wheat, “What this nation must have immediately is control of food prices. If the output of wheat is taken over by the Government, the present price, which is high enough, can be reduced 40 to 50 percent. At the same time the producer can be treated in a liberal manner.”\textsuperscript{12} Hoover believed that the US could provide enough food for its own citizens as well as allies as long as the consumption of food was monitored. “Food control does not mean bread cards for the American people. It means the broad conservation of our food, the better handling by elimination of waste and speculation. With proper control for America the Government would ask only one thing from the individual consumer that he eat plenty, but wisely and waste nothing, and if democracy is a faith worth defending our people will do this service voluntarily and willingly.”\textsuperscript{13}

A Call To Housewives & Duluth’s Response

On May 19, 1917, President Wilson issued a statement announcing Herbert Hoover as the head of the new Food Administration. “He [Hoover] has expressed his confidence that this difficult matter of food administration can be successfully

\textsuperscript{11} “President Discusses the Food Problem,” \textit{New York Times} (New York, NY), May 11, 1917
\textsuperscript{13} “Hoover Is Alarmed By Wheat Advance,” \textit{New York Times} (New York, NY), May 11, 1917
accomplished through voluntary co-operation and direction of the legitimate
distributors of foodstuffs and with the help of the women of the country”.\textsuperscript{14}

It was on the day of his appointment that Hoover spoke of his intentions for
housewives, “It is my present idea to propose a plan to the American women by
which we ask every woman in control of the household to join as an actual member
of the food administration and give us a pledge that she will, so far as her means and
circumstances permit, carry out the instructions which we will give her in detail
from time to time”.\textsuperscript{15} Hoover made an urgent request to American women that they
needed to practice food conservation, to find substitutions for the in demand foods
that were being sent overseas and to be educated and educate each other on food
preparation as well as food preservation.

Wheat was the first food product on Hoover’s agenda that needed to be
controlled, and sugar quickly followed. The American Food Administration urged
consumers to “lessen wheat consumption by at least one third through
substitutions”.\textsuperscript{16}

“Food Will Win the War” was the slogan that Hoover created for the
American Housewife. He was also enlisting every housewife to sign a conservation
pledge card. With this, the women were pledging to practice wheat-less, meat-less,
and fire –less days (fire-less to conserve fuel). By October of 1917, 2,000,000
women had signed the pledge to help provide food for those abroad. To show their
commitment to the effort, 16,000 New York women volunteered to canvas another
1,200,000 households for pledge signatures.\textsuperscript{17}

Organizations across the country, like the Women’s Council of Defense were
formed to help with the mass education of housewives. Shortly after Hoover’s
appointment the American Museum of Natural History in New York hosted a Food

\textsuperscript{14} “President’s Outline of Food Control Program,” \textit{New York Times} (New York, NY), May 20, 1917
York, NY), May 20, 1917
\textsuperscript{16} Meredith Moulton Redhead, Edith Swank Elliott, \textit{A Guide To Wartime Cooking}, (J. Heinz
Company, Pittsburgh, PA, 1943). 10
\textsuperscript{17} “16,000 Women To Aid City Food Campaign,” \textit{New York Times} (New York, NY), October 1, 1917
and Health Exhibition. As reported in the New York Times, the purpose of the exhibit was to, “show how easy it is to think of food in terms of calories so as to enable the housewife to do her shopping in scientific lines”.18

Women across the country were being provided with encouragement and information for food conservation through newspapers and government issued cookbooks. The Duluth News Tribune had a regular column titled, “Women, War and Work” by Patience Duinherbit. Mrs. Duinherbit explained in her column that in addition to home gardening and canning there was a need for the collaborative canning of excess fruits and vegetables by Duluth housewives. “The food committees of some eastern cities have established canning and dehydrating kitchens. Vegetables that are going to waste are rescued from gardens or commission houses – New York’s committee salvages the fruit and vegetables that are to be dumped from the piers. It is all taken to the central canning kitchen and there with the aid of volunteer workers it is canned or dried for next winter’s usage”.19

Prior to Hoover’s declaration for the need of women’s help, Duluth women were gathering to answer the question of how they could help the cause. In early May of 1917 the Minnesota Sate Federation of Women’s clubs hosted a meeting in northern Minnesota with the main topics of the meeting being patriotism and the conservation of food supplies. In an article reporting on the two-day convention in Grand Rapids (city north of Duluth) it stated that the spirit felt at the conference was, for one woman, “What can we do for the nation in this time of stress and emergency,’ the patriotic spirit of the meeting was nothing short of inspiring,” reported the paper.20 A Duluth woman, Mrs. O.A. Oredson was one of the speakers, her talk was titled, “The Value of Cooperation”, and the rest of the speakers focused on how Minnesota women could assist in the effort of food conservation with suggestions including the drying of fruits and vegetables as well

19 “Women, War and Work”, *Duluth News Tribune* (Duluth, MN), August 1, 1917
20 “Patriotism Keynote of Gathering,” *Duluth News Tribune* (Duluth, MN), May 12, 1917
as establishing a labor registration so that farmers could apply for assistance with planting and harvesting if needed.

In Duluth, large numbers of women were gathering to figure out their role in food conservation. 1,000 women convened in Duluth at the end of July 1917 at the calling of Mrs. F.J. O'Donnell, the local chairman of the Emergency Committee of the Women's Council of Duluth. Many Duluth women spoke at this meeting to address various topics like the registration of women in national service, child welfare as well as food conservation. Duluth resident Mrs. Charles Mitchell addressed food conservation, “It was a 'big job to discipline the American stomach with an ideal.' But that upon the saving at present of every extra scrap of food, depended the ultimate success of the war”.

Another Duluth housewife expressed “immediate need for women who wish to donate their services in the work of canning food in the crop of peas and beans on the five acres of land which five business men of Duluth and the commercial club have given”.21 The following week, 60 Duluth women met to discuss plans for offering classes on food conservation in their community.22 One of the first demonstrations in Duluth included the canning of 137 pints of fruits (blueberries and plums) and vegetables (carrots, cucumbers, beets).23

The idea of coming together as a community was strong in Duluth. As housewife and newspaper columnist Mrs. Duinherbit wrote about the new role of the American housewife, “Every intelligent woman who has imagination or sympathy is running her kitchen today, not on her own sweet whim or her husband’s stomach dictates, but according to the needs of a hungry world. Every American woman who is worthy of the name is going to co-operate with him, with the women of her community and with the women of the whole country. Cooperation is the magic word in women's world today”.24

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21 “Duluth Women As Earnest to Aid As Soldiers At Front”, Duluth News Tribune (Duluth, MN), August 1, 1917
22 “Women’s Defense Council In Session,” Duluth News Tribune (Duluth, MN), August 1917
23 “Preserve 137 Pints of Fruits and Vegetables at Demonstration,” Duluth News Tribune (Duluth, MN), August 22, 1917
Thrift and cooperation became the themes in Duluth amongst the housewives during WWI. A woman’s suffragist was quoted in a May 12, 1917 issue of the Duluth News Tribune saying, “Food is the widest concern today. We haven’t heeded the solemn warnings of Europe, whose starving people look to us for succor, and now we are facing a tremendous responsibility. How are we to be fed? Can we economize wisely by substituting thrift for careless extravagance? Now we are in danger of running into a stone-wall of food shortage. The first thing to do is to find out what kind of food we need: how and where to buy it: how to cook it to the best advantage of our husbands and growing children; what to substitute; how to keep our health by means of the proper food. We, as suffragists, will practice what we have always preached – that the women’s place is in the home conserving the household.”

The movement for the right to vote for women was ongoing during WWI. It is possible that the active role that women played during the war helped to pass the bill that granted them the right to vote in 1920.

Herbert C. Hoover made a decree to the housewives during WWI, “We have but one police force- the American woman- and we depend upon her to organize in co-operation with our State and local Food Administrators to see that these rules are obeyed by that small minority who may fail.” This was not the first time that women were referred to in a military sense. In fact, housewives were considering themselves to be kitchen warriors in defense of a nation. Duluth housewife Mrs. Charles Mitchell, in an address to fellow Duluth housewives claimed, “The women must be real soldiers, an army of thrift behind the fighting line”.

When Mrs. William Ogden Wade spoke in Duluth she declared that “the women are drafted as well as the men”, her address, to a roomful of Duluth women continued with, “This is a women’s war, more so than ever a war was before. Figuratively speaking every American bullet that will be fired will be fired from

25 “Thrift Is Wartime Slogan of Suffrage,” Duluth News Tribune (Duluth, MN), May 12, 1917
26 “Duluth Women Urged to Aid In Conservation,” Duluth News Tribune (Duluth, MN), August 1, 1917
some woman’s kitchen. And to continue the figure, the bullets will be made of meat and wheat”.27

Some women took their role of patriotism so seriously as to enlist themselves as civilian officers. A housewife in Ely Minnesota, a town close to Duluth, came up with the idea of “Inspection Kitchens”. Gleaning from the army term “Inspection Arms” when a captain of a company goes through its soldiers guns to see what condition they are kept in. Mrs. Mary Stillwell was shocked to find a surplus of flour in the homes of women in her town. She decided to continue conducting inspections on kitchens in her area. The hoarding of flour went against the government law of no more than 25 pounds of wheat flour per family at one time.28

The Food Crisis and Minnesota’s Recognition

Voluntary rationing lasted through 1917 but by January 1918 the country was in crisis and the request for compulsory rationing had made its way to Congress. The opening paragraph from an article in the New York Times read, “The insisted cry of the allied nations that more wheat must be supplied if the morale of the armies and civilian populations abroad is to me maintained and make possible a continuance of the war was met today by Herbert C. Hoover, United States Food Administrator, through the promulgation of further conservation regulations.”29 Hoover issued a statement during these final stages of voluntary food conservation; with an outright plea to the American people to follow strict ration policies. “The effectiveness of these rules is dependent solely upon the good-will of, and the willingness to sacrifice by, the American people.”

The new year of 1918 meant the crisis surrounding food was worsening for the country. The United States military decided to purchase a

27  “Speaker Shows How Women Can Help Win War,” Duluth News Tribune (Duluth, MN), February 24, 1918
28  “Inspection Kitchens To Be Command At Ely Today,” Duluth News Tribune (Duluth, MN), February 18, 1918
significant supply of the Nation’s flour for the needs of the army and navy in January\textsuperscript{30}, and because of lack of fuel for transportation there was a threat for meat to become also under control of the government.\textsuperscript{31}

To the surprise of many in the nation and also northern Minnesota, during this time of food deprivation there was also a national surplus of potatoes. And during the winter months, Duluth residents, along with residents across the country, were asked to purchase potatoes to assist in the flood of product, “Buy a Bushel of Potatoes’ Slogans galore have worked their way more or less permanently into the minds of Duluthians – and the foregoing is the latest” read a headline in the DNT.\textsuperscript{32}

The winter of 1918 proved a surplus of potatoes and a decline in wheat. “Uncle Sam Has Many Potatoes, Short On Wheat, Consume More Spuds and Release Grain For Soldiers Fighting In France,” begged a headline printed in the Duluth News Tribune on January 20.

The claim made by administrators like Julius H. Barnes, a grain officer for the US Food Administration, was that there still was not enough bread to feed the allies in England, France and Italy. And in Minnesota, State Senator George M. Peterson traveled to Duluth to propose a campaign to help spread the “Buy Bushel” idea.\textsuperscript{33} Minnesota State Food Administrator, A.D. Wilson, upon his discovery of the surplus expressed his opinion that in order to eliminate the surplus that “every man, woman and child in the United States would have to eat 100 pounds more potatoes in the next five months,” also reasoning that, “The Potato is an excellent substitute for wheat, and should be used for that purpose as much as possible in view of the shortage of wheat”.\textsuperscript{34}

Even with the surplus of potatoes however, the following day A.D. Wilson officially ordered that there be two wheat-less days a week in Minnesota (with

\begin{itemize}
\item \textsuperscript{30} “US Food Board Will Buy Third of Flour Output,” \textit{Duluth News Tribune} (Duluth, MN) January 10, 1918
\item \textsuperscript{31} “Meat Inquiry Points Seizure,” \textit{Duluth News Tribune} (Duluth, MN) January 6, 1918
\item \textsuperscript{32} “Potato Crop Danger of Loss,” \textit{Duluth News Tribune} (Duluth, MN), January 16, 1918
\item \textsuperscript{33} “Food Officers to Aid Potato Campaign Here,” \textit{Duluth News Tribune} (Duluth, MN), January 19, 1918
\item \textsuperscript{34} “Eat 100 Pounds Potatoes Each In Five Months,” \textit{Duluth News Tribune} (Duluth, MN), January 24, 1918
\end{itemize}
Wednesdays having been observed as wheat-less by Minnesotans for a few months previous and A.D. Wilson adding Mondays as well). “He expects that housewives and public eating places will be ready to comply with the new order within a week. Lauding the housewives and public eating establishments for their efforts to conserve the food”.35 Once again singling out the housewives and their significant role in the war.

Good news was brought to the city of Duluth a few days after the declaration for two wheat-less days, it was announced that the city was leading the nation in conserving its sugar. “Duluth is better supplied with sugar than any other district in the United States,” declared Mr. Edwin M. Tomlinson to the Duluth News Tribune. Mr. Tomlinson was the handler of sugar business for the Clark Tomlinson Company.36 Not only was Duluth in better standing in regards to sugar, in late February of 1918 Senator George M. Peterson announced that in regards to food conservation that “There is no city in the country that is responding better than Duluth”, in an article in the DNT it was noted “Gratifying results are attending the patriotic and whole-hearted spirit in which Duluthians are observing food conservation regulations while the 'buy a bushel of potatoes' campaign, to dispose of the national surplus of this product, is meeting with pronounced success”.37

But the country was in a sugar crisis and the Duluth News Tribune printed an outlined explanation of why there was a shortage of sugar that had been issued nationally by the American Sugar Refining Company: “Existing conditions are worldwide in their effect, not in any sense local. Any consideration of the question of available sugar supply must take into account a series of extraordinary factors. The immediate effect of the declaration of the European was to cut off from the world’s market the sugar of the Central Powers. About one-third of the world’s total production formerly came from within the present battlefields of Europe. The Western battlefront passes through the singular producing territory of France and

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35 “Mondays Wheatless In Minnesota,” Duluth News Tribune (Duluth, MN), January 21, 1918
36 “Duluth Supply of Sugar Likely To Be Adequate,” Duluth News Tribune (Duluth, MN), January 24, 1918
37 “Conservation Pays Duluthians, Says Food Board,” Duluth News Tribune (Duluth, MN), February 26, 1918
of Belgium. In consequence, England, France and other foreign countries have competed with the United States for Cuba's cane sugar”.38 A second ad by the Sugar Company was printed, at the end it stated, “Housewives can cooperate with this plan by buying these package sugars”39

By the summer of 1918 the nation was being begged by the U.S. Food Administration to be extremely conservative with their flour, sugar and beef consumption. “Every household must reduce its consumption of white flour and beef as well as sugar. The sugar situation is probably the more critical since 30,000,000 pounds of sugar are now at the bottom of the Atlantic Ocean through submarine’s warfare of a few weeks ago” proclaimed a message that was printed in the DNT by the Food Administration of Minnesota.40 This was in reference to the sinking of a submarine carrying sugar cargo off of the coast of the Atlantic.

As the war passed the halfway mark of 1918, the amount of men being drafted into the war continued to increase, which meant less men at home to farm and so again, Americans were warned that shortages were a real possibility but they were encouraged by the administration that they were capable of the task of supporting the soldiers and allies.41

Again, the people of Duluth received acknowledgement from Washington for their outstanding leadership in food conservation. From a public letter written by George M. Peter, “The people of Duluth are to be heartily congratulated upon their splendid response to the food conservation orders as received from time to time and because of this loyalty, Duluth again goes over the top and is not surpassed by any city in the United States, and by such conduct they have materially assisted in making possible the great showing for the entire state, which in turn largely assisted in making possible a lesser use of wheat substitutes and the securing of additional sugar” the letter went on to single out the housewives of Duluth, “These splendid results not only prove the determination of housewives to render valiant service

38 “Sugar,” Duluth News Tribune (Duluth, MN), January 30, 1918
39 “Sugar and Ships,” Duluth News Tribune (Duluth, MN), January 23, 1918
40 “Food Situation Growing Acute,” Duluth News Tribune (Duluth, MN) June 28, 1918
41 “Save Wheat Will Be Cry For Some Time,” Duluth News Tribune (Duluth, MN) July 21, 1918
with relation to food conservation but equally all war work to the extent that the results have been astounding and most magnificent, and this seems but typical of the attitude of Duluth as a whole”. What made the people of Duluth respond to the call of duty with such success? Perhaps the patriotism the housewives felt was a result of their husbands working in the production plants for battleships, or the fact that their husbands and sons were serving abroad. Whatever their personal drives, the women of Duluth acted as if the war depended on them.

**Food Substitutes and Recipes &The Duluth News Tribune**

The Duluth News Tribune worked as a community board for the Duluth Housewives to receive information about the war effort events. For instance when a crop was ready to be canned, a posting would be printed in the paper, like on August 14, 1917, when the headline read, “Large Crop Ready To Be Canned”. The article states that there was a large crop of vegetables from a local school and there was a need for 40 women to be there to work. It was there, at the Washington School that women conducted canning activities. Each session young girls and older women would gather, with different women’s organizations, like the King’s Daughters or the women of the Congregational Church in charge of canning each day. The paper also had a weekly column titled “Women, Work and War”.

Often the paper was used to unite the housewife community. Recipes that were considered to promote food conservation and patriotism were printed. One of the first of these recipes was printed in an August 25, 1917 issue of the DNT, “The Minnesota commission of public safety, women’s committee, has issued the following, authorized war recipes by Miss Josephine Berry, chairman of conservation and instructor”. The recipes included Steamed Brown Bread, which uses cornmeal, breadcrumbs, molasses and sour milk.

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42 “Duluth Aids Conservation, Food Orders Are Obeyed,” *Duluth News Tribune* (Duluth, MN), September 1, 1918
43 “Large Crop Ready To Be Canned,” *Duluth News Tribune* (Duluth, MN), August 14, 1917
44 “Women Are Interested In Canning,” *Duluth News Tribune* (Duluth, MN), August 1917
45 “Recipes For War Bread,” *Duluth News Tribune* (Duluth, MN), August 25, 1917
Food conservation continued on a community level among housewives throughout WWI in Duluth. The residents arouse to every request made by the Minnesota State Food Administrator A.D. Wilson. He issued a Food Conservation Sunday to be observed on Sunday February 24th 1918. The intent was for all churches to observe this day and for the Duluth residents to attend mass lectures hosted by Dr. Julius Lincoln who was a member of the US Food Administration to France. In addition to Dr. Lincoln, the Duluth housewives were able to hear another prominent speaker, Mrs. William Odgen Wade, who was representing Herbert Hoover and who was a member of the “Team B” of the United States Food Administration and also an original member or the National Council of Defense. Her purpose was to stress the importance of the co-operation of the American housewife in food conservation.

Miss. Harriet Glendon was the Emergency Home Demonstration Agent for the Food Conservation Bureau of the University of Minnesota in Duluth in 1918. During an auto show she set up an educational food conservation booth. Her intentions of having a presence at the auto show were to assist the “puzzled housewife” by providing “a hundred concrete suggestions” for recipes that complied with conservation. Including varieties of fish to supplement the shortage of meat.

Another group provided a demonstration booth on food conservation at the auto show. The Third Precinct of Duluth established themselves “for the purpose of distributing a book of excellent conservation recipes which they gathered and compiled” with the purpose of reaching every Duluth housewife. “Several Duluth women who are ‘famous’ cooks have contributed their best experiments in ‘victory’ food,” noted an article in the DNT. Included in the cookbook was a forward by the Duluth Food columnist Patience Duinherbit: “The Housewives Creed. I believe in efficiency and thrift in the full dinner pail, the clean plate and the empty garbage can. I aspire to world neighborliness and believe that to love my neighbor myself is

46 “Food Conservation Sunday Will Be Observed On Feb. 24,” Duluth News Tribune (Duluth, MN), February 3, 1918
47 “Women of Duluth to Hear Address,” Duluth News Tribune (Duluth, MN), February 23, 1918
48 “What to Eat, When, and How to Food Conservation Booth,” Duluth News Tribune (Duluth, MN), February 21, 1918
to yearn to supply his hunger as I yearn to supply the hunger of my own. I bring to the kitchen not only my whole mind and energy, but a faith that questions not the miracle of the loaves and fishes, and a trust that knows the barrel of meal and the cruse of oil cannot fail, while we honestly and prayerfully do our best to meet the needs of a hungry world".49

The Home Card which was first introduced as the housewives' pledge issued to the American housewife by Herbert Hoover and the US Food Administration became a sign of allegiance among the women, and also upon the arrival of a new card, it was a sign of change in the food culture. “It is the part of the patriotic housewife to adapt herself and her household as quickly as possible to these changes,” an article in the DNT posted in regards to the ever changing rules of food conservation. The cards had been used as a guideline for housewives and were issued multiple times by the US Food Administration. The first card was asking housewives to save wheat, meat, milk, fats and sugar. The second card asked for the use of substitutes and to observe one wheat-less and one meat-less day. The third, issued in May of 1918 asked for one wheat-less day and one meat-less day per week in addition, one meal per day should be wheat-less and one meal per day meat-less. “The women of the country are ready to cooperate,” stated the article.50

The women of Duluth were so ready that they fought for a Women’s Committee of the Duluth Council of National Defense. Many women argued that had the women’s committee been in existence earlier in the year, much more work could have been accomplished.51

The women of Duluth were also concerned with the rotting of fruits and vegetables and in the late summer of 1918 met to discuss the practice of dehydrating them. The housewives were discouraged to learn that 50 percent of these farm products went to rot on the ground because the price of labor was so high or the high price of transportation. The Duluth Federal Food Demonstrator

49  Ibid
50  “Keep Up With Home Cards I You Would Be Food Saver,” Duluth News Tribune (Duluth, MN), April 28, 1918
51  “Duluth Women Organized In Active War Work Under National Council,” Duluth News Tribune (Duluth, MN), July 14, 1918
agreed to work with the housewives to purchase the proper food dehydrating equipment in hopes of avoiding rot.\textsuperscript{52} By late September women were meeting at the YMCA in Duluth for a monthly meeting. The topic was food conservation and at this particular meeting a food drying demonstration was being held at which women could bring their own home vegetables to be dried.\textsuperscript{53}

As food shortages became more of a reality so did the need for new recipes to accommodate the lack of the familiar foods housewives used for nourishing their family. More advertisements promoting food substitutions began being published in the DNT along with a new section called “Food Hints For Duluth Housewives”. One such advertisement, sponsored by the US Department of Agriculture proclaimed cottage cheese as the new substitute for meat, claiming that one pound of cottage cheese had more protein than one pound of beef, lamb, fowl or pork.\textsuperscript{54}

Sharing recipes became a way of life for the Duluth women who gathered together to disclose new culinary tricks, like at a six day series that a group of housewives put on in March of 1918 that gave “demonstrations of quick breads involving the use of wheat and graham substitutes” and was open to all Duluth women within a certain mile radius of the precinct the demonstrations were given in. 63 women attended the first.\textsuperscript{55}

One page in the DNT from March of 1918 included headlines like, “‘Difficult Soybean Can Be Well Cooked’, ‘Save The Food To Make The World Safe’, ‘Make Dishes From Skimmed And Sour Milk’”. Cottage cheese, tapioca pudding and junket were the recipes under skimmed and sour milk.\textsuperscript{56} Also, the combination of sour milk and soda was suggested in replacement of baking soda, as it was cheaper.\textsuperscript{57}

A challenge the housewives faced was coming up with a variety of meals. Some viewed food conservation as overwhelming in coming up with meals that the

\begin{footnotes}
\item [52] “Dehydrating Food Demonstration Makes Effort To Install,” \textit{Duluth News Tribune} (Duluth, MN), August 11, 1918
\item [53] “Conservation Is Discussed,” \textit{Duluth News Tribune} (Duluth, MN) September 25, 1918
\item [54] “Eat More Cottage Cheese,” \textit{Duluth News Tribune} (Duluth, MN), March 6, 1918
\item [55] “Women Attend Flour Talks,” \textit{Duluth News Tribune} (Duluth, MN), March 12, 1918
\item [56] “Save The Food To Make The World Safe Again,” \textit{Duluth News Tribune} (Duluth, MN), March 24, 1918
\item [57] “The Week’s Official U.S Food Bulletin,” \textit{Duluth News Tribune} (Duluth, MN), June 18, 1918
\end{footnotes}
family would find satisfying and not redundant. And so Miss. Harriet Glendon offered six consecutive weeks of classes for the housewife who’s “family is tired of the same food” to learn new foods that would lend to the housewife having more of a desire to cook.\(^{58}\) Victory Bread or War Bread was decreed by Hoover as any bread that contained at least 5 percent of other cereals than wheat.\(^{59}\) An April 1918 section of the DNT was devoted to the images of War Breads with various percent of the different wheat substitutes; oats, barley, rice, kefir, corn were all recipe suggestions.\(^{60}\) Also at this time, two women were sent from Washington by the US Department of Agriculture to Duluth to give demonstrations on cottage cheese, a meat substitute being promoted by the USDA that was half the cost of meat. The women, Miss Bane and Miss Murray demonstrated soups, sandwiches, salads and appetizers that all featured cottage cheese.\(^{61}\) The women gave three talks over the course of three days in various neighborhoods in Duluth and featured recipes like cottage cheese sausage, cottage cheese nut loaf and scrambled eggs with cottage cheese.\(^{62}\)

Similar to cottage cheese, milk was also promoted as a substitution for meat. “Milk is meat.” Claimed an article in the DNT. “It does the same sort of work as meat. It may be used all through the day to take the place of meat”.\(^{63}\) A daily menu featuring milk-based meals was milk with cereal and a chocolate milk drink for breakfast, milk soup for lunch and potato soup with cornmeal crackers for dinner.\(^{64}\)

Corn oil was discovered at this time to be an acceptable replacement for fats. It was also less expensive and so the US Food Administration began to promote corn oil (and other vegetable oils) as the desired choice for cooking in replacement of

\(^{58}\) “Puzzled Housewives Told How To At Demonstration,” *Duluth News Tribune* (Duluth, MN), March 27, 1918

\(^{59}\) “Hoover Decrees ‘Victory Bread’ And Cuts Rations,” *New York Times* (New York, NY), January 27, 1918

\(^{60}\) “Do You Make These War Breads?” *Duluth News Tribune* (Duluth, MN), April 7, 1918

\(^{61}\) “Mrs. Housewife Meet Cottage Cheese Now!” *Duluth News Tribune* (Duluth, MN), April 21, 1918

\(^{62}\) “Cottage Cheese Will Save The Meatless Day,” *Duluth News Tribune* (Duluth, MN), April 28, 1918

\(^{63}\) “Milk Will Replace Meat at Breakfast, Luncheon, Dinner,” *Duluth News Tribune* (Duluth, MN), May 26, 1918

\(^{64}\) Ibid
animal fats, butters, lards or shortening. Corn oil, which is pressed from corn hearts, was suggested in the DNT to be used for frying foods and to be used in making salad dressings. Desserts were printed such as pineapple sherbet and frozen custards that use corn syrup as sweetener alternatives.

A late summer DNT column listed a number of short but useful kitchen tips under the title “Kitchen Kinks, Plain gelatin flavored with prunes cut into small pieces makes a pleasant dessert. Cold boiled codfish served with mayonnaise seasoned with garlic is an excellent French dish. The water in which corned beef has been cooked can be saved for boiling cabbage or beans. So much frying can be done in drippings that lard need not be used very frequently.”

In supporting the war, this generation of women learned to be thrift in the kitchen in a way that forever changed them. M.F.K Fisher was a food writer who reflects about her grandmother and the women of WWI, “They will feel, until their final days on earth, a kind of culinary caution: butter, no matter how unlimited, is a precious substance not lightly to be wasted; meats, too, and eggs, and all the far-brought spices of the world, take on a new significance, having once been so rare. And that is good, for there can be no more shameful carelessness than with the food we eat for life itself. When we exist without thought or thanking we are not men, but beasts.”

The End Of The Great War

The Years In Between Wars

While November 11, 1918 is the observed end to the war, it was not until June of 1919 that the Treaty of Versailles was signed and the war was truly over. It was during his time in Paris that President Wilson contracted influenza.

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65 “Corn Oil As Substitutes For Fats,” Duluth News Tribune (Duluth, MN), June 16, 1918
67 “Kitchen Kinks,” Duluth News Tribune (Duluth, MN), August 11, 1918
epidemic turned out to be world wide, and 10,000 Minnesotans of the 600,000 Americans died of it post war.69

Two major political events occurred nation wide in the year following the ending of WWI, the 18th amendment – prohibiting the sale and consumption of alcohol and the 19th amendment – granting women the right to vote. American women were noted to have had influence in both. And with the influence that women had during the war, Home Economics became a legitimate profession for women in the 1920s.70

Food anthropologist Laura Shapiro wrote about the profession of Home Economics claiming that it was a “substitute profession for women, a fragile imitation of the larger world rendered in their own terms and limited most drastically by their own pale ambitions. Complacent on their bit of turf, home economists had nothing to professionalize except the role of junior partner to men; under the shelter of the shamelessly irrelevant academic ghetto they contented themselves with producing administrators and functionaries and wives”.71 Shapiro also believes that a new image of the housewife emerged in the post war 1920’s.

Indoor plumbing, electricity, gas stoves and the refrigerator all provided an avenue for product marketing to a new type of housewife. “The advertising industry, the manufacturers of household goods, the food companies, the women’s magazines, and the schools all shared in the task of creating a woman who could discriminate among canned soups but who wouldn’t ask too many questions about the ingredients: neither angel nor scientist, but homemaker. Unlike ‘Sally’ or ‘Molly Bishop,’ those industrious heroines who starred in domestic fiction at the turn of the century and secured both love and social status by learning to cook meals of the proper weight and color, the women who set up housekeeping after World War I were not expected to realize their identities at the kitchen stove”.72 This

69 D.J. J. tice, Minnesota’s Twentieth Century: Stories of Extraordinary Everyday People (Minneapolis, MN, United States: University of Minnesota Press, 1999), 30.
71 Ibid
72 Shapiro, Splendid, 223
homemaker she speaks did not have time to spend all day on one meal and keeping up her house.

By 1920, due to the increase in mining jobs in northern Minnesota, the population of Duluth grew to nearly 100,000. With a high demand for steel in 1924 the iron range of Minnesota saw an economic boom, “Everybody needed steel like crazy,” recalled miner Frank Hrvatin, “Everything was working. They couldn’t get the ore out of that mine fast enough”.73 During the 1930’s 2/3 of all iron ore in the U.S. came from Minnesota.74

America experienced an economic and industrial boom in the late 1920’s. The building of the railway meant more people were having access to music, food and cultural activities. Followed by the stock market crash of October 1929, known as Black Thursday. By 1933, during the time known as the Great Depression, one in fifteen farm families in Minnesota had lost their land.75

World War II

What ended the Great Depression was the beginning of WWI. After the invasion of Poland by Germany in 1939 -- Germany was in alliance with Japan and Italy, and Poland had France and Britain as Allies – Britain and France declared war on Germany on September 3, 1939. In the beginning, President Franklin Delano Roosevelt wanted the United States to remain involved as an ally. On March 11, 1941, the President signed the Lease Lend Act, which was officially called, “An Act To Promote the Defense of the United States”.76 The understanding was that the United States was to continue to stay neutral but the country also supplied materials

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73 Tice, Minnesota’s Twentieth, 58
74 Radzilowski, Minnesota, 105
75 Tice, Minnesota’s Twentieth, 75
to the allies. Three months later Japan bombed Pearl Harbor on December 7, 1941 and the US officially entered the war.\textsuperscript{77}

To avoid the issues of food shortages that were present during WWI, various government organizations were formed to prevent price inflation and to manage goods during war. The Office of Price Administration (OPA) was created in 1941 to manage the price of goods.\textsuperscript{78} The Office of War Information (OWI) was established to produce wartime propaganda and to promote patriotism.\textsuperscript{79} The presence of the OWI is one example of how government agencies changed between the two great wars. Wilson and Hoover did express the important role of women in food conservation however the OWI’s soul existence was to promote patriotism through conservation and specifically targeted towards American housewives. Part of their propaganda was to show food as a “vital war material”.\textsuperscript{80}

There were many reasons for food shortages that differed from WWI. One reason was that the ships used to carry coffee and sugar was also being used to transport soldiers.\textsuperscript{81} Kitchen fats, which were used to manufacture glycerin, an important ingredient for explosives were being used to offset the lack of vegetable fat shipments coming into the US from the Middle East.\textsuperscript{82}

As of January however, food rationing was already being suggested with sugar the first food that would be rationed and its price was continuing to increase.\textsuperscript{83} In Duluth, rationing boards had been allocated by early January 1942.\textsuperscript{84} Not only was sugar being considered for rationing but also in January of 1942 it was predicted that, oil and fats would be in a shortage by the end of that year.\textsuperscript{85} Not only was shortages an issue, the reality was that riots over food had begun in Europe and

\textsuperscript{77} Ibid
\textsuperscript{78} Brock, \textit{Rosie}, 159
\textsuperscript{80} Ibid
\textsuperscript{81} Brock, \textit{Rosie}, xxvii
\textsuperscript{82} “Kitchen Fat Collections Are Good,” \textit{Duluth News Tribune} (Duluth, MN), July 30, 1942
\textsuperscript{83} “Raw Cane Sugar Prices Go Up,” \textit{Duluth News Tribune} (Duluth, MN), January 4, 1942
\textsuperscript{84} “Rationing Boards Organized,” \textit{Duluth News Tribune} (Duluth, MN), January 6, 1942
\textsuperscript{85} “Shortage of Sugar Is Seen,” \textit{Duluth News Tribune} (Duluth, MN), January 19, 1942
that placed an even greater responsibility on Americans to provide.\textsuperscript{86} The official rationing of sugar was announced the evening of January 24, 1942. The intent was to remove excess sugar from hoarders and to allow every person one pound of sugar per week.\textsuperscript{87} The sugar-rationing program went into effect in April and was organized and thought out from the beginning.\textsuperscript{88}

President Roosevelt followed many of the same practices as President Wilson and Herbert Hoover during WWI. He stated that women were the first line of defense in the war on the home front. In an address to women in February of 1942 he says, “The eyes of the nation are upon you. In far-flung outposts, in the military isolation camps near home, men at sea, men in tanks, men with guns, men in planes, look to you for strength”.\textsuperscript{89}

Much of the government-funded advertising to housewives was through posters. The newspapers printed advertisements from food companies. A New York Times article from August 1941, housewives were being asked to can their own fruits, specifically peaches in this article, because of the high demand that existed for commercially canned fruits and vegetables and also in preparation for the winter months.\textsuperscript{90}

There was lots of political pressure placed on American women, “The housewife must think of everything she gives her family to eat and everything she buys for them to wear as part of the country’s wartime effort. Let us plan with this in view, and cheerfully economize in food without impairing our health, learning to like foods that are good for us and can be obtained,”\textsuperscript{91}

With the signing of the Lease Lend Act came a push for the production of military equipment and boom women were being encouraged to join the workforce in factories. The image of Rosie The Riveter was introduced in 1943; Rosie

\begin{itemize}
  \item \textsuperscript{86} “Food Riots Are raging In France,” \textit{Duluth News Tribune} (Duluth, MN), January 22, 1942
  \item \textsuperscript{87} “U.S. Will Ration Sugar Next Month,” \textit{Duluth News Tribune} (Duluth, MN), January 25, 1942
  \item \textsuperscript{88} “Rationing of Sugar Is Assured,” \textit{Duluth News Tribune} (Duluth, MN), April 5, 1942
  \item \textsuperscript{89} Susan Marks, \textit{Finding Betty Crocker: The Secret Life of America’s First Lady of Food} (United States: Simon & Schuster Adult Publishing Group, 2005), 87.
  \item \textsuperscript{90} “Housewives Get Plea to Can Peaches,” \textit{New York Times} (New York, NY), August 9, 1941
  \item \textsuperscript{91} “Fish, Canned Or Fresh, Is Macaroni Dish,” \textit{Duluth News Tribune} (Duluth, MN), April 3, 1942
\end{itemize}
represented the patriotic factory working American woman. 6 million women joined the workforce and 350,000 the military services during 1941 and 1945. In addition to factory work, there was an even more riveting role for Rosie to play, and that was of managing the food supply.

First Food Institutes In Duluth

A May 3, 1942 article in the DNT announced the beginning of food rationing in Duluth. “Duluth residents, getting their first taste of food rationing in World War II, will begin registering Monday for ‘ration book one’ – which from now on will be as necessary as money in purchasing sugar”. This first step in rationing was not compulsory but was advised and so for four days in May, Duluth residents registered for ration books at local schools. The purpose of these preliminary ration books was to see who had sugar and how much in order to evenly distribute the supply.

The OPA began to suggest recipes that required no sugar at all in January of 1942. Alice Denhoff wrote ways to adapt to eating without sugar for the DNT, “There are many true, natural flavors that are actually killed by addition of sugar. Grapefruit, for instance, has a much finer taste when it is unsweetened, and the same holds true of fresh pineapple or strawberries. Did you know that the tea and coffee experts would never commit the crime of sweetening these drinks? They say it is a crime because sugar destroys the real fine flavors of the brews”. Honey, molasses and maple syrup were commonly suggested as sweeteners. The housewives supported each other and tried to find the silver lining in the war situation through articles like this, “There’s always a bright spot in any situation – or nearly always. One of the high spots in food shortages and substitutes for the food stuffs we are used to, is that housewives will discover a lot of new and interesting

92 Brock, *Rosie*, xvi
93 *Duluth News Tribune* (Duluth, MN), May 3, 1943
94 *Duluth News Tribune* (Duluth, MN), May 3, 1943
95 “Substitutes Are Many For Sugar,” *Duluth News Tribune* (Duluth, MN), April 5, 1942
recipes, and also that many of the substitutes are really better for our bodies than the articles we are in the habit of using”.96

During the summer of 1942, the Minnesota Director of the Office of Price Administration, T.G. Driscoll helped to rally the Duluth housewives for less sugar consumption. “Sugar for canning will be rationed at the rate of one pound for every four quarts up to maximum of 10 pounds per person. In other words, for a family of four persons to obtain the 10 pound per person allotment the housewife must can 160 quarts of fruit”. If a housewife knew exactly how much fruit she was planning she was able to acquire sugar according to the guidelines. Sugarless canning was encouraged and Driscoll explained that sugar was not needed to keep fruit from spoiling. 97

The OPA funded many food institutes across the country for housewives. In New York, the Wartime School for Housewives provided classes and demonstrations for recipes like sugarless chocolate nut bars and sugarless fruit scones and soft molasses cookies. The school also provided classes on meat-less meals.98

The first food preservation institute in Minnesota was in Duluth. The purpose of the institute was to teach housewives about new technologies in food preservation, mainly the process of canning and preserving by a pressure cooker. Along with lessons on new technologies in food preservation, the institutes also provided information on Victory Gardens and nutrition.99

The process of preserving was such an integral part of the OPA propaganda that the pressure cookers were eventually distributed by government agencies and placed on the ration list so that families had to apply. Women in Duluth had to apply for a pressure cooker in May of 1943 and a committee was appointed to decide, based on family size who would receive them.100

96 “New Recipes Uncovered By Shortages,” Duluth News Tribune (Duluth, MN), April 10, 1942
97 “No Sugar Shortage Viewed,” Duluth News Tribune (Duluth, MN), June 27, 1942
99 “Cannine Institute Set Today,” Duluth News Tribune (Duluth, MN), May 20, 1943
100 “Committee Is Named For Cooker Rationing,” Duluth News Tribune (Duluth, MN), May 19, 1943
Later that month, the War Production Board announced that they would produce and provide an increase in pressure cookers that year to help with the preserving of Victory Gardens (home and community vegetable gardens). A committee of Duluth women was appointed to advise in the distribution of the limited pressure cookers available. In her book of wartime recipes, “How To Cook A Wolf” M.F.K. Fisher writes about the ease of using the pressure cooker, “It does almost miraculous things: string beans are cooked in three minutes, a Swiss steak is tender and juicy and full of flavor in but a few more, and on and on. It reduces cooking time to an almost boring minimum.”

The example of wartime efforts by housewives in Duluth was certainly set by the housewives of WWI. The efforts of the next generation were similar in cooperation and community efforts in getting work done. Before the US was officially involved in the war, Duluth housewives were gathering for a presentation by Mrs. John D. Jenswold, who was the vice chairman of the women’s activities and council secretary of the Duluth Civilian Defense Council.

The Duluth News Tribune, similar to in WWI, helped give housewives encouragement in the kitchen and to reinforce their patriotism. There was a “we can do it” attitude in their articles targeted at housewives. As Alice Denhoff wrote for the DNT, “Lots of housewives are finding it a pleasant task to turn out meals that satisfy the sweet-toothed ones, and yet stay well within the sugar allotment.” The article from early April 1942 provides ways for housewives to prepare desserts without the addition of sugar.

An article printed in early spring introduced a column on canned fish recipes with, “The housewife must think of everything she gives her family to eat and everything she buys for them to wear as part of the country’s wartime effort. Let us plan this in view, and cheerfully economize in food

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101 “Committee Is Named For Cooker Rationing,” Duluth News Tribune (Duluth, MN), May 19, 1943
102 Fisher, 200
103 “Civilian Defense Week Set,” Duluth News Tribune (Duluth, MN), November 8, 1941
104 “Substitutes Are Many For Sugar,” Duluth News Tribune (Duluth, MN), April 5, 1942
without impairing our health, learning to like foods that are good for us and can be obtained. 105

In northern Minnesota housewives from communities surrounding Duluth were joining together at local canneries to preserve the excess food supply. In early August of 1942 three canning centers in Duluth were established by the Duluth Civilian Defense council and provided demonstrations, like tomato juice and rhubarb juice canning one day and storing and bringing vegetables another, as well they provided the resources for canning.106

Being closer to where food was grown was an advantage and most of the women were arriving with produce from their family farms. A variety of canneries all funded by different government groups, were staffed with instructors, janitors and equipment. There was no price to use the canneries, women only needed to provide their own jars. The combined efforts of these housewives were so successful that they often had such a surplus that they were able to ship food to American soldiers overseas. This was in grave contrast to housewives in cities like New York where they had to wait for the larger canneries to distribute food to their communities.107

Rationed Foods

Sugar was the first food to be rationed during WWII, on May 5, 1942. Coffee followed on November 29. Coffee, because it was an imported product was rationed due to the fact the military needed space on ships, also the countries that produce coffee were also being asked to supply war products, which reduced the production of coffee.108 The OPA released a list of foods that were to be placed on the ration list for March 1943 which included most processed foods like canned and bottled fruits

105 “Fish, Canned or Fresh, Is Macaroni Dish,” Duluth News Tribune (Duluth, MN), April 3, 1942
106 “Canning Study Sites Announced,” Duluth News Tribune (Duluth, MN), August 9, 1942
107 “Food Canneries Hum in Duluth Area: Hundreds of Women Process Foods at Community Centers,” Duluth News Tribune (Duluth, MN)
108 “Typical Queries by Housewives,” Duluth News Tribune (Duluth, MN), February 19, 1943
(applesauce, baby foods, grapefruit juice), canned and bottled vegetables (baby food, beans, tomatoes), canned soups and dehydrated fruits and vegetables were included on this list. Shortages meant that some foods, like beef, poultry, eggs, and wheat were either high in price or hard to find or stopped being produced. On March 29, 1943 meats and fats were on the ration list. Animal fats were used for the production of explosives, synthetic rubbers, plastics and other war products and so they were on the ration list. Non-rationed meats included liver, heart, tongue, sweet breads, brains, kidney, tripe, bacon and oxtail. Recipes began to emerge using these cuts of meat in the DNT.

**Victory Gardens**

As in WWI, the growing of vegetables was an essential part of food conservation. During the first war, the East Side neighborhoods of Duluth issued the “A Garden For Every Home” campaign in the spring of 1918 with the hopes of enlisting “every resident of the two eastern lake shore sections of the city in the greatest garden and food producing boom Duluth has ever seen”. The Lakeside-Lester Park Community Club founded the campaign in hopes of “impressing the absolute necessity of greater food production this year”.

Duluth along with other cities had been asked by the federal government to be “self sustaining in the matter of vegetables which can be raised in home gardens, so that it will not be necessary to draw from home consumption on the limited supplies needed for the soldiers and the American allies”. Because of the long and harsh winters in Duluth, residents had been advised to plant hearty vegetables that would last through the winter like beets, potatoes and carrots.

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109 “New List of Rationed Foods,” *Duluth News Tribune* (Duluth, MN), December 28, 1942
110 “Rationing Review Of WWII,” *Duluth News Tribune* (Duluth, MN), September 9, 1945
111 “Housewives Like Points,” *Duluth News Tribune* (Duluth, MN) February 13, 1944
112 “Call Issued For Volunteers, Asks Gardens For City,” *Duluth News Tribune* (Duluth, MN), March 22, 1918
113 “Lakeside Garden Forces Marshal For Summer,” *Duluth News Tribune* (Duluth, MN), April 4, 1918
The DNT supplemented the gardens with recipes on how to prepare the produce, like an article “Several Uses For Tomatoes From Your War Garden,” which included, “Tomatoes a la crème, baked tomatoes and stuffed tomatoes”.114

With the east side underway, talks began in late March of 1918 to help establish “War Gardens” in the West Duluth neighborhoods.115

Instead of local women’s organizations as in WWI, the second war brought the newly titled Victory Gardens, which were funded by the OPA and the Civilian Defense Council of Duluth, and were promoted through political posters and in the DNT. Families were encouraged to plant gardens. A page wide headline in the DNT read, “Farms and Garden Tracts Will, As In World War One, Be in Great Demand Again.”116

The Duluth Civilian Defense Council provided 700 plots to Duluth residents, for free rental but asked for a $4 fee to help with costs for the project.117 In February of 1943 residents enrolled in the project to receive a 33ft by 66 ft. plowed and fertilized plot. Duluth residents were given the opportunity to apply for the plots before they were plowed with gardening information provided by the Duluth Garden Flower Society.118 By Mid May 1943 Duluth had six large community garden plots plowed, located in East and in West Duluth.119

**Nutrition and the New National Diet**

The discovery of vitamins and the benefits of minerals in diet occurred beginning in 1910 and became public knowledge in the 1920’s. The concepts of calories and nutrition through vitamins had Americans paying closer attention to what they ate. By the time WWII arrived a national concern for maintaining a

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114 “Several Uses For Tomatoes From Your War Garden,” *Duluth News Tribune* (Duluth, MN), August 11, 1918
115 “West Duluth Is Urged To Plant Many War Gardens,” *Duluth News Tribune* (Duluth, MN), March 30, 1918
116 “Farms and Garden Tracts, Will As During World War One, Be In Great Demand Again,” *Duluth News Tribune* (Duluth, MN), January 18, 1942
117 “Duluthians Enroll For Victory Gardens,” *Duluth News Tribune* (Duluth, MN), February 17, 1943
118 “V-Plots Are Prepared”, *Duluth News Tribune* (Duluth, MN), May 13, 1943
119 “V-Garden Tracts Readied”, *Duluth News Tribune* (Duluth, MN), May 6, 1943
nutritious diet while practicing food conservation existed. Nutrition and combating hunger became part of the national defense dialogue during WWII. As Charlotte Biltekoff has researched, the threat of war moved “dietary reform to a home-front priority”.121

Government Agencies had a more organized and intentional purpose in regards to food and nutrition reform in WWII than WWI. The ideals of nationalism and patriotism that existed in the first war around food conservation, war gardens and home canning were a hit the ground running campaign for many of these WWII organizations. “Among these home-front campaigns were several distinct but coordinated efforts to manage the food supply and keep both soldiers and civilians well fed during the war,” wrote nutrition historian Charlotte Biltekoff, and to her, it was the National Nutrition Program that led a “home-front dietary reform movement that focused on nutrition education”.122 Proper diets equated to good morale, which led to the feeling of patriotism. Across the US, state and local nutrition organizations were formed to promote the standard national guidelines as issued by the National Nutrition Program.123 The “Basic 7” was the first food guide issued by the National Nutrition Program and outlined seven nutrition groups that Americans should be sure to eat each day. The three main reasons given for understanding nutrition were “1. Food can win or lose the war. 2. Food can make or break our nation. 3. Food can build or destroy morale.” As a result it placed the knowledge of nutrition as a patriotic duty.124 It was in December of 1942 that the Secretary of Agriculture, Claude R. Wickard ordered that commercial white bread should be enriched with vitamins and minerals.125

The Office of War Information (OWI) was responsible for all food propaganda during the war. The OWI also had a direct influence to the advertising media and gave them outlines for how to “present food to the public”.126 The OWI

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120 Biltekoff, Eating Right, 47
121 Biltekoff, Eating Right, 51
122 Biltekoff, Eating Right, 55
123 Biltekoff, Eating Right, 57
124 Biltekoff, Eating Right, 59
125 “Flour Priced Raised,” Duluth News Tribune (Duluth, MN), December 30, 1942
126 Ibid
used political posters to promote food conservation. These posters depicted various situations of food production and preserving, like canning and growing vegetables, all in the context of war.

“Food Is A Weapon, Don’t Waste It!”
“Can all you can: It’s A Real War Job!”
“Save The Wheat And Help The Fleet! Eat Less Bread!”
“Food Is A Weapon, Don’t Waste It! Buy Wisely, cook carefully, and eat it all!”
“Dig For Victory, Grow Your Own Vegetables.”

In his article “World War II Poster Campaigns: Preaching Frugality to American Consumers” Terrance Witoski explains that frugality was one of the core American values during WWII. The poster campaigns influenced the way Americans viewed their role in the war through food and the American values of the OWI were “sanctioned” via these posters.127 It is Witoski’s conclusion that these posters, and the frugal rhetoric endorsed by the government were the top influencers on the American way of consuming during WWII.

The OWI appealed to the ethos of the American public, food is a relatable topic that can appeal to a person who may not otherwise understand the importance of cooperation in war efforts. Biltekoff writes, “Food was particularly well suited to the job of enlisting Americans in the war effort because it was ‘a keystone of the home’ and a focal point for social occasions”.128

“‘The language of food is universal,’ the OWI explained. ‘A Whole galaxy of human emotions revolve around the stark fact that man must eat to live. These emotions provide an inexhaustible source of appeals for action’”.129

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128 Ibid
129 Ibid
But food writer of the time, M.F.K. Fisher argued that the balanced diet created more stress than needed and that it was possible to feel healthy by eating a variety of types of foods and meals. “And, in most cases now, the happy medium, gastronomically, is known as the balanced diet. A balanced diet in almost any well meaning institution is a plan for meals which means that at each of the three daily feedings the patient is given a set amount of carbohydrates and protein and starch, and a certain amount of International Units, and a certain number of vitamins in correct ratio to the equally certain amount of minerals, and so on and so forth”.130 She expressed that this idea of serving three balanced meals a day, during wartime, was an unnecessary stress for housewives. “So that everywhere earnest eager women are whipping themselves and their budgets to the bone to provide three ‘balanced’ meals a day for their men and children”.131

Patriotism and The Recipes for War

The American diet evolved during the Second World War. Not just because of the discovery of vitamins and a new view on nutrition, but the recipes that came from food rations shaped the way a generation of housewives cooked. Being patriotic meant to avoid the foods that were preferred and familiar. Sugar and butter for these women, were food products of the past.

“The housewife has a big food budgeting job on her hands in this year of higher prices, heavy taxes and War Bond,” an Associated Press article in the DNT expressed in 1943, “It will mean spreading the butter thin, buying cheaper cuts of meat and the less expensive fruits and vegetables. She will need to have a closer acquaintance with the more abundant foods and the vitamins in them.”132 By

131 “Thrifty Meals Star In Wartime,” Duluth News Tribune (Duluth, MN), February 4, 1943
132
making large demands in public forums like the newspaper, government propaganda, through articles like this, that ran regularly, reinforced the important role that housewives had.

Betty Crocker was a fictional housewife character created by the General Mills Company in Minneapolis Minnesota. During WWII, the General Mills’ Home Service and marketing departments positioned Betty Crocker as the poster example with all of the answers for the wartime housewife. She also used the propaganda of the OWI to support women, “Food rationing at home helps to save lives of American servicemen”. Betty Crocker was a symbol of the patriotic housewife and she often would publish requests to her fellow homemakers to stay prepared for the worst, “Hail to the women of America! Every American homemaker who selects food wisely, prepares it carefully and conserves it diligently is an important link in our national war effort... At the end of the day, let us be sure we can say: ‘I worked for freedom today. I served at least one food from each of the basic seven food groups. I prepared the food I served with care. I wasted no food this day’.” A nutritionist and Betty Crocker associate, Mrs. Elsa Wallin Louis held a two-day “Victory Food School” in Duluth where she spoke of “food shortages, giving appetite appeal to nutritious meals, co-operation with the government’s share-the-food program”. And providing women with the resources to accommodate those conditions.

Sugar-less recipes for desserts were very common in the newspaper as well, “Lots of housewives are finding it a pleasant task to turn out meals that satisfy the sweet toothed ones, and yet stay well within the sugar allotment. The dessert fanciers, too, are discovering that there are other sweets in the world besides sugar”. Some of these sweetener substitutes were honey, molasses and corn syrup. Often, sugar was left out completely of recipes,

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133 Marks, 88
134 Marks, 93
135 “Nutritionist To Hold Food School here Next Week,” *Duluth News Tribune* (Duluth, MN), November 15, 1942
136 “Substitutes Are Many For Sugar,” *Duluth News Tribune* (Duluth, MN), April 5, 1942
While in WWI the main idea behind food conservation was just that, to conserve or learn to live without. During WWII, in the wake of compulsory food rations, food-manufacturing companies were coming up with substitute food products as a solution to the problem. Also the role of home economists was growing in importance and they were often responsible for the testing and creating of alternatives. Food products like Spry vegetable shortening were created, the product did not use as many ration points as butter and so advertisement towards housewives pitched it as a product that "goes a long way" and was "an important energy food".137

Because meat production was so low and the cost of certain cuts was extremely high, meatloaves and extending meat was a big trend in food conservation recipes during WWII. A Kellogg's Bran Flake advertisement in the DNT gave suggestions for stretching the meat supply, "try this wonderful recipe for All-Bran Meat Patties! They are made with famous KELLOGG'S ALL-BRAN – which adds a delicious crunchy texture to the dish with all the valuable vitamins, minerals, proteins and carbohydrates ordinarily found in ALL-BRAN".138 An influx of meat extending recipes appeared, one feature claimed, Meat Dressing Is Valuable Extending Item" where dressing refers to a bread stuffing that is served underneath meat rather stuffed inside, "No guessing needs to be done if the homemaker has a file of recipes for food combinations that go well with any roasted meat dish".139 The variety of dressings included celery, rice and corn. The appeal of the meatloaf was that it could be made using leftovers and it also could be served warm or cold or on a sandwich.140 Cracker stuffing was deemed the “meat extender de luxe” as the recipe of sausage and cracker crumb stuffing could be used to stuff squash, onions or cabbage.141 Like many wartime cookbooks, "How To Cook A Wolf" also includes a

137 "This Delicious Square Meal for 6 Takes Less Than 2 Red Points", Duluth News Tribune (Duluth, MN), May 13, 1943
138 "Meat Patties With All-Bran Make Meat Go Further", Duluth News Tribune (Duluth, MN), May 2, 1943
139 "Meat Dressing Is Valuable Extending Item", Duluth News Tribune (Duluth, MN), May 20, 1943
140 "Meat Loaf Is A Wartime Economy," Duluth News Tribune (Duluth, MN), October 1, 1942
141 "Cracker Stuffing Fills Several Vegetables," Duluth News Tribune (Duluth, MN), May 3, 1945
variety of suggestions for food substitutions and how to stretch meals. Adding breadcrumbs to scrambled eggs or using half the sugar when making jams and adding baking soda, or when boiling pasta or potatoes to save the water and use it as a soup base.\textsuperscript{142}

Nut breads became popular during this time because they also provided protein and often used alternatives to wheat flour as were breads baked with beans. Peanut bread, brown bread with baked beans, and steamed brown bread (this included corn meal, sour milk and molasses in the recipe) were featured in an article promoting their use as sandwich bread for lunch boxes.\textsuperscript{143}

Honey, which was not on the rationed list, and used as a sugar substitute became the star of many recipes. Honey cookies, honey loaf, honey fruit rolls, glazed pork with honey were recipes featured in just one of the many articles about honey in the DNT.\textsuperscript{144} Housewives were urged to use honey in fillings for sandwiches like apricot or cream cheese fillings, or added to horseradish for a sauce.\textsuperscript{145}

The DNT hardly printed articles or advertisements about food that did not include patriotic prefixes like “economy”, “wartime recipe” or “food value”.\textsuperscript{146} Cheese was named a “Victory Food” in a 1942 article, “Cheese has always been the choice of epicures, but it should be prominent in everyone’s serving repertoire because it’s a nutritious, plentiful victory food”.\textsuperscript{147}

There was a sense of housewife comradely in the recipes printed in the DNT. Columns reassured these women that they were cooking for a common cause. Blanket statements were used to find a commonality among the housewives, which was learning to cook under extremely special circumstances. “There’s always a bright spot to any situation – or nearly always. One of the high spots in food shortages and substitutes for the food stuffs we are used to, is that housewives will

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\textsuperscript{142} Fisher, 201
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\textsuperscript{143} “Nut Breads Make Tasty Sandwiches,” \textit{Duluth News Tribune} (Duluth, MN), February 16, 1943
\textsuperscript{144} “Unrationed Honey Used In Recipes,” \textit{Duluth News Tribune} (Duluth, MN), February 18, 1943
\textsuperscript{145} “Honey Is Used In Fillings For Sandwiches,” \textit{Duluth News Tribune} (Duluth, MN), September 1, 1942
\textsuperscript{146} \textit{Duluth News Tribune} (Duluth, MN) May 20, 1943
\textsuperscript{147} “Cheese Tray Nutritious Victory Food,” \textit{Duluth News Tribune} (Duluth, MN), October 1, 1942
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discover a lot of new and interesting recipes, and also that many of the substitutes are really better for our bodies than the articles we are in the habit of using.”

“Patriotic desires to avoid wasting fats, oils and shortenings have probably caused you to wave a farewell hankie to deep-fried food for the present. In the meantime we can sauté, pan-fry and shallow-fry” reassured an article in the paper. By the summer of 1943, “Wartime Meat Recipes” were featured weekly, “Baked Bacon Squares with Cream Gravy”, “Steak with Spanish Sauce”, “Rolled Rack of Veal” were recipes that called for on average ¼ pound of meat per person, smothered in a savory sauce.

Planning was often emphasized in the wartime recipes featured in the DNT. “Baked Ham Serves for Several Meals” proclaimed a headline, with further explanation, “Baked ham is a favorite, but this year a large supply of hams is being fed to the men in our armed forces, here and abroad, so those of us at home will understand why it is necessary to have a ‘half’ instead of a ‘whole’ ham”. Another common thrift trick seen in the DNT was using leftovers, specifically meat leftovers. These leftovers found their way into various meat pies or turnovers. “Hamburger–Vegetable Pie”, “Steak and Kidney Pie”, “Ham and Cheese turnovers” featured already cooked meats.

**Rationing To The End**

By 1944, with two years of rationing behind them, the housewives were still promoting the idea that food conservation was patriotic and an essential part of winning the war. What made the situation dire was that the US was actually running out of food and fears were high of major food shortages. The tone of the food section in the DNT shifted, “A fact which is important to everyone in America is that there will not be enough food this year, and probably for several years to satisfy

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148  “New Recipes Uncovered By Shortages,” *Duluth News Tribune* (Duluth, MN), April 10, 1942
149  “Deep – Fried Food Gone for Duration”, *Duluth News Tribune* (Duluth, MN), May 9, 1943
150  *Duluth News Tribune* (Duluth, MN), May, 1943
151  “Baked Ham Serves For Several Meals”, *Duluth News Tribune* (Duluth, MN), May 13, 1943
152  “Leftovers Are Used to Make Meat Pies”, *Duluth News Tribune* (Duluth, MN) May 13, 1943
all of the claimants for it”. In this same article it was expressed that Americans had to begin to change what they viewed as both edible and palatable. The supply of food fats – lard, shortening, oils – were tightening because the production of these products was decreasing. There were reports of a greater shortage of meats, eggs, butter and poultry. Corn shortages meant there was not enough feed for beef. And housewives were being offered a trade of meat points for their animal fats at butcher shop collections. The country’s reserve of wheat was also dwindling because the product was being used for human and animal consumption.

A butter substitute spread, molasses-sweet potato-butter, which was created in food test kitchens as a result of a record sweet potato harvest for 1944 was written about in the DNT as, “being patriotic and making use of abundant foods, this wonderful spread besides being rich in iron has a high vitamin A content, supplied by the sweet potatoes. Another good feature about this spread is that it is very economical”. Because of its use of molasses, which was known in WWI for being a sugar substitute and in addition in WWII was being propagated for its vitamin content, along with sweet potatoes – another highly nutritious food – and with the inclusion of the term economical, suddenly the spread, molasses-sweet potato-butter was the newest “grand spread” among housewives.

Because the end of the war and rationing and food shortages was not in near sight, the housewives had no other option but to see it as an opportunity to improve from the previous year’s efforts, “Canning time is here again,” began an article from a July 1944 DNT article, “and this year American housewives will avoid many of last year’s mistakes. Easiest of all foods to can are fruits, tomatoes and pickled vegetables.” The article included step-by-step pictures for canning provided by the Department of Agriculture. Cutting down on waste was a new area of food

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153 “Homemaker is Told To Conserve Food,” Duluth News Tribune (Duluth, MN), March 5, 1944
154 “Fat Supply Tightening,” Duluth News Tribune (Duluth, MN), August 6, 1944
155 “Less Food Is Forecast,” Duluth News Tribune (Duluth, MN), February 13, 1944
156 “Housewives Like Points,” Duluth News Tribune (Duluth, MN), February 13, 1944
157 “Wheat Reserve Of U.S. Dwindle,” Duluth News Tribune (Duluth, MN), October 24, 1943
158 “Molasses Aids Cookery,” Duluth News Tribune (Duluth, MN), August 3, 1944
159 “This Is The Way We Can Our Fruit,” Duluth News Tribune (Duluth, MN), July 2, 1944
conservation focus for 1944. A ban on the return of baked goods to bakeries was implemented and J.W. Hines, the special consultant on bakery problems in the War Food Administration had “urged all housewives to co-operate with their grocer and baker as a patriotic contribution to the war effort by buying baked goods wisely and conservatively”. He feared that many baked products went to waste and ended up in the trash.160

The WFA believed that “the great quantity of wasted food is the only considerable reservoir of extra food supplies that exist in the world today for civilians, the armed forces, the Allies and starving populations”. Because of this the WFA offered more food conservation classes to housewives, the first in Duluth was in March of 1944, the purpose was to try and get Americans to have a greater appreciation for food and a willingness to change their eating habits.161 Advertisements in the paper began to focus on waste and tips like planning meals, buying only what you need, preparing food carefully and storing food correctly to avoid waste.162

Along with waste, time management was a key theme in recipes towards the end of the war. Because many women were also working war jobs or other factory positions generally held by men, they had little time to prepare meals for their families. Newspaper titles like “Easy-To-Make Salads For The Busy Housewife” were published. As she has compiled in her book “Rosie’s Riveting Recipes”, Daniela Turudich researched how the workingwoman altered recipes to accommodate her busy schedule and to cook economically and in a short period of time during WWII, such as a Victory Spread recipe that was a butter extender and Uncle Sam’s War Recipe For Biscuits a recipe that asked for corn meal or ground soybeans to extend the flour.163

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160 “Save Food, Cut Waste, WFA in Duluth,” Duluth News Tribune (Duluth, MN), June 15, 1944
161 “Homemaker Is Told To Conserve Food,” Duluth News Tribune (Duluth, MN), March 5, 1944
162 “Just A Minute Lady, Food Fights Freedom,” Duluth News Tribune (Duluth, MN), October 21, 1943
163 Turudich, 24
Because rationing had lasted so long, the tone of the DNT food sections for the final year stayed the same. Every week was a new thrift recipe, encouragement to the housewives and updates and newest food shortages. One would think that at some point they would express discouragement. In fact the day before the announcement of the end of the war, the DNT printed an article explaining that the OPA was reducing the amount of ration points for butter, and cheese and possibly meat.164 The war ended in September 2 of 1945.

The front page on September 2, 1945 of the DNT announced that Japan had surrendered and the war was over. The U.S, still had obligations to help feed the Allies abroad and so food rationing had been anticipated for up to a month after the war165, but in the days that followed information was given that explained the One month after the war, an abundance of produce was seen. Plentiful was used to describe the stock of potatoes, lettuce, broccoli, carrots, onions and many other vegetables.166 There were recipes that gave new meaning to the Victory Garden Salad, the idea of celebrating the bounty of a home grown meal rather than advice as to how to spice up the ordinary, everyday vegetables they had been forced to grow and eat, “When made of vegetables gathered dewy fresh from your own garden, this salad is especially delicious”.167 Terms like pre-war to starting popping up and more gastronomic encouragement was given, “Homemakers will find chicken and turkeys more plentiful this fall than in pre-war days”. 168 Recipes for extravagant foods like oysters and entertaining recipes for football season were being published in the DNT. By the end of September the paper was insisting to housewives that they deserved to allow themselves breakfast in bed on day a week.169

Conclusion

164 “Ahh Meat,” *Duluth, News Tribune* (Duluth, MN), September 1, 1945
165 “Some Rationing Still Needed,” *Duluth News Tribune* (Duluth, MN), September 18, 1945
166 “Market Good For Vegetables,” *Duluth News Tribune* (Duluth, MN), October 3, 1945
167 “Victory Garden Salad,” *Duluth News Tribune* (Duluth, MN) October 11, 1945
168 “Home Grown Vegetables,” *Duluth News Tribune* (Duluth, MN) 1945
169 “Here’s A Luxury Breakfast In Bed,” *Duluth News Tribune* (Duluth, MN), September 27, 1945
When asked by Herbert Hoover to join as members of the food administration, the women of Duluth answered the call. They did not wait for canned goods to be sent to them, they formed institutes and planted gardens and took care of themselves and their greater communities through their war efforts. The patriotic efforts of the Duluth housewives gained them National recognition during WWI. In WWII Duluth was the location for many of the state of Minnesota’s first food institutes. It had over 700 community - Victory Garden plots and was host to many of the country’s leaders in war administration. A number of women's groups were formed to be leaders in the community and to promote food conservation. The housewives took it upon themselves to receive education on food preservation and to share the information with others. They researched the practice of food dehydration and then requested the equipment to process food in the city. What is clear through the articles written in the Duluth News Tribune during both wars is that the housewives of Duluth reacted to the need for food conservation with a strong sense of civic duty. They contributed years of creative food ideas in a time when food was running out. They were motivated and took initiative to organize and make an impact. They did not glorify themselves, and in fact they often compared themselves to soldiers who were on the kitchen home front. Their commitment to food conservation stayed consistent until the day the war ended.
Bibliography


