The Efficient Cook: The Upper Lakes & St. Lawrence Transportation Company's *Cookery Manual*

Thomas Malcomson

Research into the preparation and cooking of food aboard lake freighters is wanting. This article explores the Cookery Manual created for the ships' cooks in the Upper Lakes and St. Lawrence Transportation Company, in the late 1940s. The manual's goal was to provide nutritious, tasty meals contributing to the physical and mental health, contentment and efficiency of the company's crews. The manual is described and four potential sources of inspiration for such a resource are considered. The potential sources include, the Canadian Government nutrition program at the end of the Depression and through World War II; the navy cookbooks in use during the war; cookbooks for the land based cook; and the labour/management relations after the war. All four likely contributed to the Cookery Manual's development. Much remains to be discovered about food and cooking aboard ships.

La recherche sur la préparation et la cuisson des aliments à bord des cargos lacustres font défaut. Cet article explore le manuel de cuisine créé à la fin des années 1940 pour les cuisiniers des navires Upper Lakes et la compagnie de Transportation du St-Laurent. L'objectif du manuel était de fournir des repas nutritifs et savoureux contribuant à la santé physique et mentale, au contentement et à l'efficacité des équipages de l'entreprise. Le manuel est décrit et quatre

***The Northern Mariner / Le marin du nord* 34, no. 3 (Autumn 2024), 339-372**

sources potentielles d'inspiration pour une telle ressource sont considérées. Les sources potentielles comprennent le programme de nutrition du gouvernement canadien à la fin de la Dépression et pendant la Seconde Guerre mondiale ; les livres de cuisine de la marine utilisés pendant la guerre ; livres de cuisine pour le cuisinier terrestre; et les relations patronales-syndicales après la guerre. Tous les quatre ont probablement contribué à l'élaboration du manuel de cuisine. Il reste encore beaucoup à découvrir sur l'alimentation et la cuisine à bord des navires.

We may live without friends, we may live without books
But civilized man cannot live without cooks.

by Sir Edward Robert Bulwer-Lytton (1831-1891),
from the poem "The Dinner Hour"
appearing on the *Cookery Manual*'s first page[1] [2]

Food has held a central place in several key stories in maritime history. To name but two familiar ones: the search for a preventative for scurvy which ravaged ship's crews, and the mutiny aboard HMT *Bounty* while carrying breadfruit from Tahiti to the West Indies. This essay explores the story behind one Great Lakes shipping company's effort to improve the food and cooking aboard its ships.

Perhaps the most expansive study on food afloat is Janet MacDonald's *Feeding Nelson's Navy*, focusing on the long Eighteenth Century.[3] Her work exemplifies the importance of food, not only for maintaining health but in the development of positive morale among the ship's crew. Research on order and disorder aboard ships at the end of the Napoleonic War era reveals that food obtained through illegal means, as in exchange for a captured vessel or removing food from a prize, was used by captains to placate their crews.[4]

---

1 English novelist, playwright, poet, and politician, Sir Edward George Earl Bulwer-Lytton is credited with creating the line, "It was a dark and stormy night," first used in his novel *Paul Clifford* (London, UK: Henry Colburn & Richard Bentley, 1830).

2 The author wishes to thank Isabel Campbell and Fiona Lucas for commenting on an early draft of this paper, and Jeff Noakes, of the Canadian War Museum.

3 J. Macdonald, *Feeding Nelson's Navy: The True Story of Food at Sea in the Georgian Era* (London, UK: Frontline Books, 2014).

4 T. Malcomson, *Order and Disorder in the British Navy, 1793-1815: Control, Resistance,*

Knut Weibust studied life aboard sailing ships between 1870 and 1920, finding large differences in victualling and food quality among various nations.[5] The quality and quantity of meals played a major role in crew contentment, or lack thereof. Even though countries had strict regulations around victualing, reality usually meant that the bare minimum was provided, and often that was not maintained.

Aubert and Arner discussed how food played an essential role in "satisfaction aboard ship."[6] The galley staff's preparation of food was their work, while the crews' meals were part of their remuneration. Any decrease in food quantity or quality, projected a sense of management devaluing the crew's work efforts, leading to tension. Food issues were present in union negotiations for higher wages. Aubert and Arner asserted that food held a very emotional element as it is linked to thoughts of home cooked meals, provoking childhood memories of a mother's cooking. For the galley stewards, preparing a good and economical meal was the goal. Complaints about the meals reflected negatively on the galley staff's abilities. These very different perspectives on meals converged at the table and could easily lead to either comity or enmity.

Sari Mäenpää explored the British 1906 Merchant Shipping Act's requirement of certified cooks.[7] The Act increased the demand for cooking schools to provide the training for ships' cooks. Mäenpää stressed the rise in passenger shipping, and poor conditions immigrants faced aboard British ships as two significant forces leading to legislation to improve victuals and the quality of cooks. Further, the enhancement of food storage aboard ship (in particular refrigeration) and technical innovations in the galley added pressure to train cooks before they went to sea. Cookery schools for seagoing cooks first appeared in Britain in the 1890s, but had few students, for such education was not necessary to be hired. The 1906 law required "a few weeks' training" and only a month at sea in any capacity as enough to become a certified cook.[8] The British legislation did not result in a quick improvement to fare aboard ship, or the ability of cooks. The Canada Shipping Act of 1906 did not contain

---

Flogging and Hanging (Woodbridge, UK: Boydell Press, 2016), 86-91.

5 K. Weibust, *Deep Sea Sailors: A Study in Maritime Ethnology* (Stockholm, SE: Kungl, Boktryckeriet P.A. Norstedt & Söner, 1969), 83-95.

6 V. Aubert and O. Arner, "On the Social Structure of the Ship," *Acta Sociologica 3.1* (1958): 200-19, see 204, https://doi.org/10.1177/000169935800300118.

7 S. Mäenpää, "From Pea Soup to Hors d'oeuvres: The Status of the Cook on British Merchant Ships," *Northern Mariner/Le marin du nord* 11.2 (April 2001): 39-55, https://doi.org/10.25071/2561-5467.598.

8 Mäenpää, "From Pea Soup," 42. What this training was to involve, nor the schools that taught cookery skills to seafarers have been explored in the literature.

any reference to the qualifications of ships' cooks.[9]

Cookery books for sea cooks were produced by a number of people, experienced in cooking within a ship's galley's unique space, and those who cooked ashore. One such volume was the pocket size *Cookery for Seamen* (1894) by Alexander Quinlan and N. E. Mann, who taught in the Liverpool Training School of Cookery, in Liverpool, England.[10] Quinlan taught courses for sailors wanting to be cooks, Mann instructed domestic servants and restaurant staff to cook. The book listed three types of food, "flesh-forming," "heat-giving" and "bone-building." and acknowledged that the way food was cooked affected its "value." The rules for roasting, baking, boiling, stewing, frying, broiling or grilling and steaming were given. A section outlined keeping animals aboard ship, and how to slaughter and butcher them to render particular cuts of meat. Fifty-six pages of the seventy-two page book contained recipes for sauces, baked goods, meats (hot and cold), puddings, soups and assorted sides. The end of the book featured ads for food items and galley utensils.

It is unknown if cookery books like Quinlan and Mann's were used aboard ships sailing on the Great Lakes during the early twentieth century. There is an absence of research concerning what the Great Lakes shipping companies did in terms of food provision, its quality, and the training of galley staff.

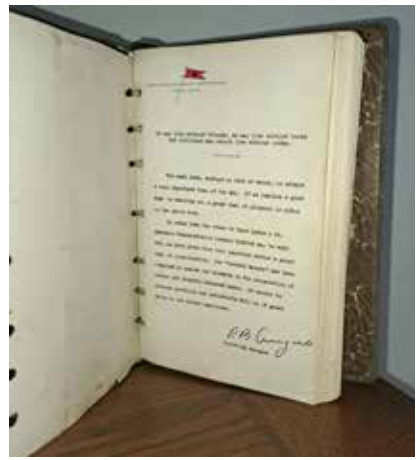
One company, The Upper Lakes & St. Lawrence Transportation Company [hereafter: Upper Lakes], produced a *Cookery Manual* for the use of cooks aboard the company's lake freighters.[11] This paper examines the 1949 edition of the *Cookery Manual*. After a brief introduction to the company and a review of the manual's contents, four potential sources of inspiration are explored. These possibilities include: the Canadian nutrition campaign launched in 1939 and accelerated during World War II; Canadian and American navy cookery manuals employed during the war; general cookbooks; and the labour/management relations in the post-war years. First, however, a brief summary of our current view of cooking aboard lake freighters in the 1940s will help to provide the context for the manual's development.

---

9 "Canada Shipping Act," *Revised Statutes of Canada*, Vol. 3 (Ottawa, ON: Samuel Edward Dawson, 1906). Canadian shipping law mirrored British law through this era as a result of its British colonial past and the Colonial Laws Validity Act 1865 that gave Britain authority to approve the laws of former colonies. This authority was removed with the Statute of Westminster in 1932. See, T. Mc Dorman, "The History of Shipping Law in Canada: The British Dominance," *Dalhousie Law Journal* 7.3 (1983): 620-53, https://digitalcommons.schulichlaw.dal.ca/dlj/vol7/iss3/14/.

10 A. Quinlan and N. E. Mann, *Cookery for Seaman* (2019; repr., Liverpool, UK: C. Tinling and Co., 1894).

11 Upper Lakes & St. Lawrence Transportation Company Limited*, Cookery Manual,* author's copy. It was purchased from the auction site Maxsold, in 2020.



The *Cookery Manual* for the Upper Lakes & St. Lawrence Transportation Co. Ltd. and The introduction page within the *Cookery Manual*. (Author's collection)

Cooking on Great Lake Freighters

The study of food aboard freighters circa the 1940s is dominated by the personal accounts of sailors. Perhaps the best summary appears in Frank Boles' *Sailing Into History: Great Lakes Bulk Carriers of the Twentieth Century and the Crews Who Sailed Them*.[12] The personnel in the ship's galley, known as the steward's department, included a chef or first cook, a second cook acting as assistant, and two porters.[13] While the first cook prepared the main courses for all meals, the second cook worked at breakfast, the salads and desserts for supper and dinner. Up to 1950 a third cook was often present preparing food after dinner for the crew on watch overnight. If a third cook wasn't present their responsibilities fell to the second cook. One porter would wash dishes, help with simple food prep and serve the deckhands, helmsmen and engine room crew, in a crew mess. Officers were served by another porter in a separate more formal dining room. In the late 1930s cooks were hired either by the shipping company, or the ship's captain.[14]

Boles states that two views exist about food served aboard lake freighters.[15]

---

12 F. Boles, *Sailing Into History: Great Lakes Bulk Carriers of the Twentieth Century and the Crews Who Sailed Them* (East Lansing, MI: Michigan State University Press, 2017), 20-5. Differences, or similarities, between American and Canadian owned lake freighters in terms of mess arrangements have yet to be explored.

13 "Labor Conditions in Great Lakes Shipping," *Monthly Labor Review* 45.2 (August 1937): 269-80, see 270.

14 "Labor Conditions," 271.

15 Boles, *Sailing into History*, 21-2.

One is that crews were well fed by talented cooks using good ingredients. Certainly this appears true with ships carrying passengers or ship owners, when everyone seemed to step up their effort. This is the perspective steward Albert Bartlett held for the American *Pontiac*'s crew, a freighter in the Cleveland Cliffs Steamship Company that plied the Great Lakes in the 1940s. Bartlett claimed the food "was [of] very high quality in all aspects."[16] Morning coffee was accompanied by donuts, and birthday cakes were made for officers and crew members.

The other view is that many crews experienced cooks with little ability, who simply repeated the few meals they could reasonably make. Such dining experience was met with dissatisfaction and rejection by the crew, though, as a captive audience they had little recourse. Complaints to the captain, or their union, might lead to the incompetent cook's removal, but never guaranteed that the next cook would be any better. Bartlett recalled that even with good food, some crew members griped "about the way their steak was done." Some men claimed the ulcers they had were from "the greasy ship board cooking… [and] weren't due…to the kind of food they ate when they went on shore and to the very heavy drinking that they did."[17] Bartlett recalled the cook countering complaints by standing in the mess doorway swishing a carving knife along a sharpening stone, and barking "what's the problem here?" This had a tendency to quell the objections.[18]

When ships loaded iron ore or coal, the dust would penetrate every part of the ship. Bartlett described laying out clean plates, "and in five minutes there was enough dust collected that you could write your initials in the dust."[19] On ships without the *Pontiac*'s quality of food, the grime would only add to the discontent. As for water, ships carried their own fresh water supply, often refilling the tanks from the lakes, when in Lake Huron or above. Cleveland Cliffs Steamship Company banned drawing water from Lakes Erie and Ontario, as it was "not suitable for drinking."[20] If water was needed on those lakes, the ship would replenish from a port side fire hydrant.

Boles found that many cooks who tried new menu options were frustrated by their crew's demand for more traditional British and northern European fare.[21] Untrained cooks tended to provide an abundance of food, right after the ship was resupplied. This had two effects, the first was a feast or famine cycle

---

16 A. Bartlett, transcript, Albert A. Bartlett Collection (GLMS-103), Institute for Great Lakes Research, Bowling Green State University, [hereafter IGLR], 90-2, 54.
17 Bartlett, IGLR, 91.
18 Bartlett, IGLR, 101-2.
19 Bartlett, IGLR, 84.
20 Bartlett, IGLR, 93.
21 Boles, Sailing into History, 23.

between re-supply dates, and the second, was a crew that put on a lot of extra weight (with the attending health issues).

Into the late 1940s, the preparation and presentation of food on board a lake freighter was hit or miss, more miss than hit.[22] Expertise in food prep, nutrition, menu planning, let alone cooking were not always present. The *Cookery Manual* prepared for the Upper Lakes stewards' department appears to be an effort to correct the situation. Before exploring that manual, a brief company history is appropriate.

The Company:

Gordon Leitch and James Playfair established the first grain silos in Toronto Harbour, in 1928, aptly named Toronto Elevators. The plan was to take advantage of the enlarged fourth Welland Canal, by bringing grain directly to Toronto, by ship. The Upper Lakes began life in 1931 as the Northland Steamship Company when Gordon Lietch, G. R. Martin and Jimmy Daynes bought their first vessel, the *Sarnian*.[23] The ship carried wheat from Thunder Bay to their Toronto grain silos. A year later Leitch went to Chicago and convinced James Norris, of Norris Grain Company, to invest in the shipping business, naming the venture, the Upper Lakes & St. Lawrence Transportation Company. The company grew rapidly, having thirty ships by December 1937.

During World War II ten Upper Lakes freighters were requisitioned for the war effort, six of which were lost to enemy action in the Atlantic. Gordon Lietch's son John (aka Jack) served as a navigator aboard Royal Canadian Navy ships escorting convoys during the Battle of the Atlantic and then on anti-U-boat patrols in the North Sea.[24] Jack joined his father's company in 1946. After the war the Canadian and American governments made plans to construct the St. Lawrence Seaway, allowing larger deep-sea ships into the Great Lakes. Gordon Leitch and Norris realized that innovation in ship size and layout was needed to respond to the changing business context. To that end they began to enlarge their fleet, in number and tonnage.

When the *Cookery Manual* made its appearance, the company had twenty lake freighters and six barges on the Great Lakes.[25] Captain Robert Bruce Angus, who had commanded the *Sarnian* became the Operating Manager in

---

22 W. Kaplan, *Everything that Floats: Pat Sullivan, Hal Banks, and the Seamen's Unions of Canada* (Toronto, ON: University of Toronto Press, 1987), 12.

23 Wally Macht, *The First 50 Years: A History of Upper Lakes Shipping Ltd.* (Toronto, ON: Virgo Press, 1981); E. B. Gilliam, "The Thirties: There Was More to Upper Lakes Than Ships," https://web.archive.org/web/20081010192119.

24 "John Daniel Leitch," For Posterity's Sake, http://www.forposterityssake.ca/CTB-BIO/MEM002432.htm.

25 *The Great Lakes Red Book* (Cleveland, OH: Penton Publishing Co., 1948 and 1949).

1938, a position held until he retired in 1958.[26]

Gordon Leitch died in 1954 and Jack took over the company. In 1959, the company's name changed to Upper Lakes Shipping Ltd. and owned ships, the Port Weller Dry Dock, and a series of grain elevators around the lakes. The 1960s saw the advent of self-unloaders and the Upper Lakes Shipping Ltd began building its own at Port Weller. Involvement in deep sea shipping was the major, late 1970s, change. In 2011, Upper Lakes Shipping Ltd (and its subsidiaries) was sold to Algoma Central Corporation.[27]

The *Cookery Manual*:

Currently, there are no available documents which explain the *Cookery Manual'*s development. The manual consists of single sided, typed pages placed in a seven-ring binder. No title page, nor publication date are given. There are two unpaginated lists at the end, one is an "Authorized Provision Purchase List" and the other a "List of 1949 Provision Suppliers," both are dated as "revised March 31, 1949." The potential date of creation for the manual will be discussed in the conclusion.

In the introduction Operating Manager Robert Angus stresses the importance of crews having a good meal. The manual would "assist our Stewards in the preparation of better and properly balanced meals."[28] He encouraged them to study it carefully, taking advantage of the information it contained, and using it as they worked.

The are thirteen chapters, the first of which is simply one page underlining the manual's purpose to assist the steward in being "an efficient Cook." The galley staff are reminded that they play a significant role "in maintaining the efficiency of any fleet." The text stresses that people are "happier, healthier and…worked better when well fed" and attained "the maximum efficiency and output of which we are capable."[29] Satisfaction from making such "a substantial contribution towards the success of the Fleet" would be the cook's reward.[30]

It encourages the cook to pay attention to "colour, design and attractive form," and develop their knowledge of timing and temperature to ensure an appetizing, nutritious, and edible meal. The science of nutrition, if not their

---

26 "Capt. R. Bruce Angus: Learned trade in sail, headed laker fleet," *Globe and Mail*, 29 October 1966, 48.

27 Chamber of Marine Commerce, "Canadian ships fly flags at half-mast in honour of Captain of Industry Jack Leitch" (5 May 2020), https://www.marinedelivers.com.

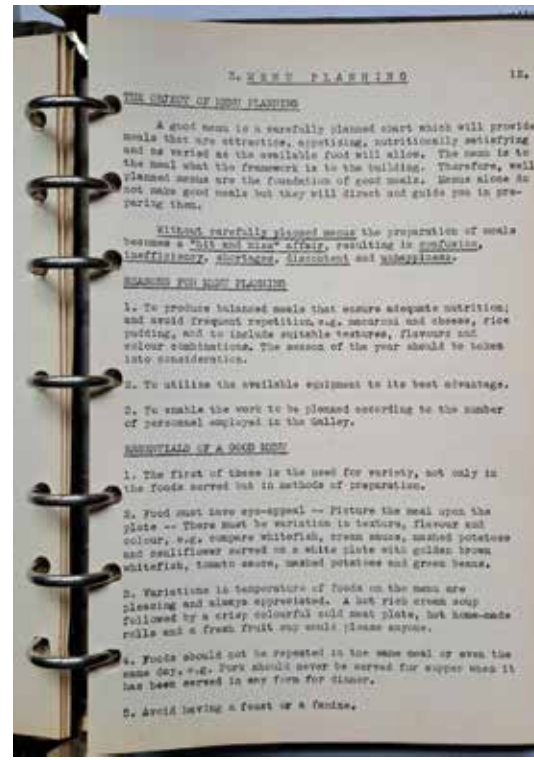
28 *Cookery Manual*, i.

29 *Cookery Manual*, 1.

30 *Cookery Manual*,1.

expertise, had to be basically understood to provide an "adequate diet."

A chapter on nutrition follows; it covers proteins, minerals, vitamins, starches and sugars, fat, roughage and water. Their role in building, repairing and maintaining tissue is described, along with the foods in which they are found. The influences of cooking time, temperature and soaking in water on proteins, minerals, and vitamins is noted. Exposing foods containing Vitamin C to even the galley's heat was to be avoided, as not to degrade the essential vitamin. Food prep was to be restricted to just before use, and vegetables should never soak in water for longer than appropriate cooking. The cook is encouraged to prepare vegetables in small amounts, for immediate serving, to ensure the highest nutritional value as possible. Some leeway is encouraged, such as when cooking cabbage. Though nutritionally best when steamed, steamed cabbage's "appearance and flavour are such that it is left uneaten."[31] The cook ought to boil it instead as consumed, less nutritionally rich cabbage, appealing to sight, aroma and taste is better than wasted cabbage.



3. MENU PLANNING 11.

THE CONTENT OF MENU PLANNING

A good menu is a carefully planned chart which will provide meals that are attractive, appetizing, nutritionally satisfying and as varied as the available food will allow. The menu is to the meal what the framework is to the building. Therefore, well planned menus are the foundation of good meals. Menus alone do not make good meals but they will direct and guide you in preparing them.

Without carefully planned menus the preparation of meals becomes a "hit and miss" affair, resulting in confusion, inefficiency, shortages, discontent and unhappiness.

REASONS FOR MENU PLANNING

1. To produce balanced meals that ensure adequate nutrition; and avoid frequent repetition, e.g. macaroni and cheese, rice pudding, and to include suitable textures, flavours and colour combinations. The season of the year should be taken into consideration.

2. To utilize the available equipment to its best advantage.

3. To enable the work to be planned according to the number of personnel employed in the Galley.

ESSENTIALS OF A GOOD MENU

1. The first of these is the need for variety, not only in the foods served but in methods of preparation.

2. Food must have eye-appeal -- Picture the meal upon the plate -- There must be variation in texture, flavour and colour, e.g. compare whitefish, cream sauce, mashed potatoes and cauliflower served on a white plate with golden brown whitefish, tomato sauce, mashed potatoes and green beans.

3. Variations in temperature of foods on the menu are pleasing and always appreciated. A hot rich cream soup followed by a crisp colourful cold meat plate, hot home-made rolls and a fresh fruit cup would please anyone.

4. Foods should not be repeated in the same meal or even the same day, e.g. Pork should never be served for supper when it has been served in any form for dinner.

5. Avoid having a feast or a famine.

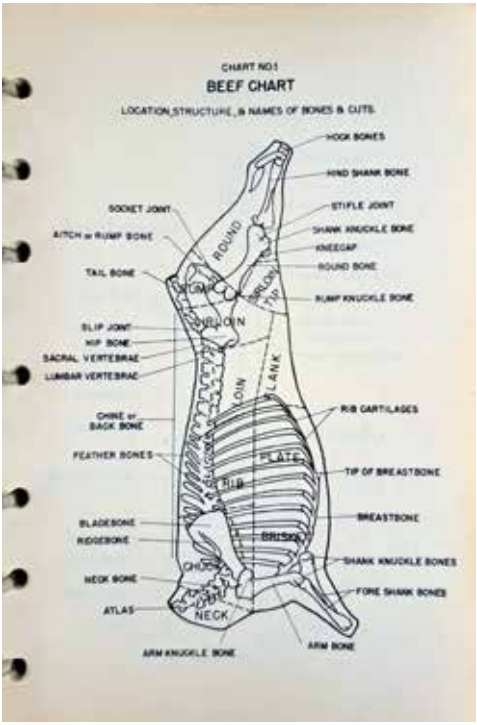
The old adage, "a well fed crew is a happy crew," begins with careful menu planning.

Menu planning is described as being to the meal "what the framework is to the building."[32] It directs and guides the galley staff in preparing the meal. Failure to have a good menu mapped out for a week or two would result "in confusion, inefficiency, shortages, discontent and unhappiness" (emphasis in the original).[33] Menus prevented repetition, ensured nutrition, and facilitated appropriate use of galley equipment and galley personnel. A list of essentials

---

31 *Cookery Manual*, 10.
32 *Cookery Manual*,12.
33 *Cookery Manual*, 12.

is given, encouraging variety in food served, how it is prepared, the intermixing of cold and warm items within the same meal, never to repeat the same food within a day, avoiding a lot of fried food, providing a range of choices for dessert, and serving appropriate portions. The cook is encouraged to make the food attractive, through the variation of "texture, flavour and colour." The manual asks the reader to consider the difference between, "whitefish, cream sauce, mashed potatoes and cauliflower served on a white plate with golden brown whitefish, tomato sauce, mashed potatoes and green beans."[34] These rules are followed by a selection of potential menu items for breakfast, dinner and supper, and beverages. A list of salads, soups and desserts is given for dinner and supper. Selecting from among these items a week's menu plan could easily be worked up without repetition.



Cooks were provided with a diagram for butchering beef, veal, lamb and pork, as full carcasses, or even sides, were cheaper than individual cuts of meat.

Chapter Four delves into the cooking of beef, pork, sheep, fowl and fish. It is the first real instruction in food prep and cooking to preserve nutrients and yet offer variety of texture, taste and temperature. As meat was received aboard, often as a side or whole carcass, the cook was to inspect it, immediately. Old meat had hard white flinty bones, while young meat had pink porous bones. The former was tough and the latter more tender. Cooks were to develop the skill of cooking meat that was of inferior grade or old, to make it "palatable." The quality was readable in the carcass, with firm and smooth lean and marbled fat, being desirable. Poor quality appeared as "scrawny and angular carcasses, with irregular fat and lean soft to the touch."[35] As a major protein source care was to be taken in its preparation so as not to over-cook. Beef is divided into beef and veal, while pork is separated into pork, bacon and ham.

---

34 *Cookery Manual*, 12.
35 *Cookery Manual*, 20.

The ship's cook uses a bandsaw to slice the rib cuts for the evening's supper. (Historical Collections of the Great Lakes, Bowling Green State University)

Proper storage and preparation are described. Rules include hanging the meat in the refrigerators coolest section, spaced out. Frozen meat had to be kept frozen until used. When cutting the meat, every scrap is to be used in the meal, or kept to make soup stock, stews or to be minced. Bartlett described throwing such extra meat and bones overboard.[36] Stewards are reminded to slice away from themselves when deboning meat. Bartlett's narrative recalls a cook who had cut himself so badly he required hospitalization.[37] The manual describes in detail how the galley personnel would butcher a side of beef, to create particular cuts. Additional comprehensive instructions detail butchering lamb and mutton, both small and large carcasses, and pork. Drawings of a side of each type of meat, identifying where each cut came from are followed by tables listing which cuts are broiled, pan-fried, cooked in water, or braised. No instructions for butchering fowl or filleting fish are provided, as they probably

36 Bartlett, IGLR, 93.
37 Bartlett, IGLR, 49.

arrived already gutted. A brief explanation follows of how to render fat from beef, pork and cured ham.

Tough cuts of meat are to be cooked with moist heat, via simmering, stewing, and pot roasting. Tender meat is best cooked with dry heat, broiling, roasting, pan-boiling or frying. Over cooking is to be avoided as dried meat was unappealing. Lean meat with fat on the outside is best stewed, while marbled lean meat ought to be simmered. For simmering meat the lid is to fit firmly on the pan to keep the moisture within. Gravies are recommended and basic instructions describe how to prepare them from the meat's drippings.

The appearance of fresh fish is described, noting it sinks in fresh water. Frozen fish is to be cooked frozen, as it retains more taste. Several methods of cooking fish are simply listed, with no description.

Four, one or two page chapters, cover the preparation and cooking of vegetables, soups and soup stocks, salads and salad dressings, and cereals. These perfunctory passages stress preserving nutrition in the vegetables, the proper seasoning of soups, the freshness of salads and vegetables and herbs as garnish, and the importance of cereals, with detailed directions for making rice pudding and tapioca. Soups are for stimulating the appetite, never constituting the main course.

A lengthier chapter on flour mixtures describes the baking of muffins, cakes, and pies. The overall message is successful baking depends upon using a "standard recipe, ingredients [being] measured accurately and directions followed."[38] The liquid to flour ratio for several types of flour mixtures is provided, as is a list of baking terms and their definitions. A number of troubleshooting scenarios are given to explain why things hadn't worked out. If no oven thermometer is available, a tablespoon of flour on a pie plate in the centre of the oven reveals the temperature range after five minutes. A light brown colour indicates 250-325F; a golden brown meant 325- 375F; and a dark brown is indicative of 375-450F.

The tenth chapter deals with the purchasing and receiving of supplies for the galley. Cost is a central issue throughout the section. Knowing the type, quality and amount of food required is essential. Becoming familiar with the prices of different suppliers and alternatives assists the steward to keep costs down and avoid waste. Fresh fruit and vegetables are to be bought in season, but not at first appearance at market, as that was the most expensive. Cooks are to study the purchase invoices and price lists of suppliers and daily newspapers for market reports. Careful planning of what to order requires knowing what is in the ship's larder and refrigerators. A week's menu facilitates ordering only what is needed. Cooks must review the supplies as they arrive to ensure

---

38 *Cookery Manual*, 41.

The tight confines of a ship's galley necessitated the efficient use of space. Note the traditional white uniform of the cook, working at the deep fryer. A fan in the porthole helped to cool what could become a very warm space. (Historical Collections of the Great Lakes, Bowling Green State University)

they match the order. Poor quality, or bad goods, are to be returned and a note made on the invoices. Invoices are to be mailed to the head office as soon as possible.

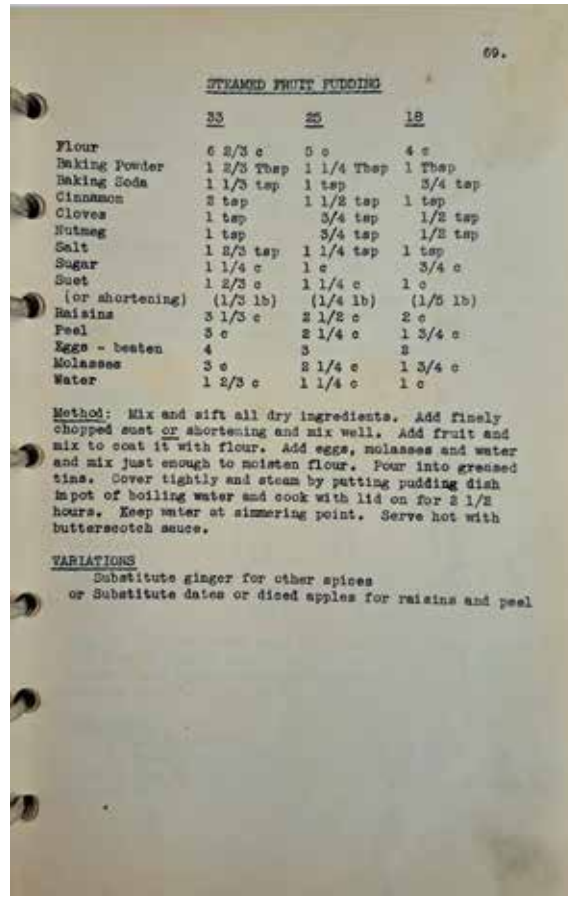
Chapter Twelve concerns sanitation. Cleanliness is seen as paramount, in order to prevent food poisoning and the spread of disease. Cooks are instructed to bathe once a day, cut their nails short, have short hair, or wear a hair net or cap. Hands and nails are to be scrubbed before handling food, and repeated after visits to the heads, handling boxes or unwashed food. They are to wear clean clothes every day. If a cook feels ill, they are to report to the captain. Rashes, pimples, "boils, infected cuts, colds, and sore throats are a source of food contamination."[39] The cook should avoid handling food if they had "any of these complaints."

Stewards are to use forks, spoons or tongs when plating cooked food. Spoons used to taste cooking food are to be washed thoroughly before reuse. Food poisoning could only be fought by being clean and properly handling food. The "most likely" causes of food poisoning are listed. Pork, veal, and lamb

39 *Cookery Manual*, 49.

are always to be cooked well done. Leftovers are to be used within twenty-four hours, served cold if possible, or reheated thoroughly.

The First Cook (a term used only twice) is charged with proper food storage.[40] This meant the use of sealed food containers, storage of dry goods in the pantry, and meats, dairy, spreads and leftovers in properly maintained refrigerators. The refrigerators are to be emptied and cleaned once a week. Cooks are cautioned to peel off outside leaves of cabbage and lettuce that are bad and use the good inside sections. No badly dented, leaking or blown can good is to be used, but returned to the supplier.



69.

STEAMED FRUIT PUDDING

	33	25	18
Flour	6 2/3 c	5 c	4 c
Baking Powder	1 2/3 Tbsp	1 1/4 Tbsp	1 Tbsp
Baking Soda	1 1/3 tsp	1 tsp	3/4 tsp
Cinnamon	2 tsp	1 1/2 tsp	1 tsp
Cloves	1 tsp	3/4 tsp	1/2 tsp
Nutmeg	1 tsp	3/4 tsp	1/2 tsp
Salt	1 2/3 tsp	1 1/4 tsp	1 tsp
Sugar	1 1/4 c	1 c	3/4 c
Suet (or shortening)	1 2/3 c (1/3 lb)	1 1/4 c (1/4 lb)	1 c (1/5 lb)
Raisins	3 1/3 c	2 1/2 c	2 c
Peel	3 c	2 1/4 c	1 3/4 c
Eggs - beaten	4	3	2
Molasses	3 c	2 1/4 c	1 3/4 c
Water	1 2/3 c	1 1/4 c	1 c

Method: Mix and sift all dry ingredients. Add finely chopped suet or shortening and mix well. Add fruit and mix to coat it with flour. Add eggs, molasses and water and mix just enough to moisten flour. Pour into greased tins. Cover tightly and steam by putting pudding dish in pot of boiling water and cook with lid on for 2 1/2 hours. Keep water at simmering point. Serve hot with butterscotch sauce.

VARIATIONS
Substitute ginger for other spices
or Substitute dates or diced apples for raisins and peel

Deserts were a critical element in a good meal. This Steamed Fruit Pudding recipe is given for the various crew sizes aboard Upper Lakes & St. Lawrence freighters.

The first line of defence against flies, cockroaches, rats and mice is cleanliness and the covering of food. For cockroaches the First Cook is tasked with the frequent use of cockroach powder, spray guns, fumigation and live steam to eradicate them. Rats and mice require traps, the blocking of all open spaces, such as around pipes, and the covering of garbage bins.

The longest chapter (number thirteen) contains sixty-one recipes, divided into subsections covering, soups, meat and fish sauces, salad dressings, meat and fish dishes, pastry and pies, puddings, dessert sauces, miscellaneous (fried, baked sides, deserts), cakes, and finally, cookies. Each recipe is measured out

40 *Cookery Manual*, 52, 55.

for all three different crew sizes. The list of measured ingredients is followed by the order in which ingredients are combined. The recipes represent a northern European fare, familiar to the company's crews. Executing the recipes was an unrealistic expectation without the person doing the cooking and baking being competent in the art and science of food preparation, to which chapters two to twelve were devoted.

The "Authorized Provision Purchase List" covers all the ingredients necessary to prepare the recipes.[41] It cautions the steward to purchase, choice qualities of canned vegetables and fruits, buying fresh vegetables and fruits only when in season, and (again) priced reasonably. Beef (hip chuck, hamburger and hindquarter) should be commercial, or blue grade cuts. Commercial was a tougher, low-grade beef, while blue grade was slightly better but not A grade. Both were much cheaper than the higher grade of beef. While freedom of choice is given for which cereals were purchased, Salada's Yellow Label tea, in bulk, and two and half pound cans of Maple Leaf Brand mincemeat were imposed. The aim was to provide low cost, basic ingredients.

The "List of 1949 Provision Suppliers" covers ten Canadian ports and the Welland Canal, and closes out the manual. In the Welland Canal and at Fort William, the Upper Lakes fleet is divided in half, each group dealing with a specific supplier so as to spare one store from the demands of the whole fleet. At Montreal supplies are purchased from the Canada Steamships Line Ltd. stores department. This is interesting as Bartlett's chronicle reveals the broad efforts made by some contractors to bribe ships' cooks to order from them over their competition.[42] Upper Lakes may have set the provision suppliers to eliminate this graft.

An additional set of recipes, in the form of an insert from a *Toronto Star* newspaper, dated 1959, was found within the author's copy.[43] This supplement deals with fish dishes and muffin recipes. There are some smudges and stains on the backs of the recipe pages, while all pages are slightly yellowed with age. The binder is well worn with the embossed Upper Lakes name almost unreadable, with some staining. The smudges, stains and insert suggest this manual was used and supplemented.

Certainly, the Upper Lakes' self-published *Cookery Manual* was not the first of its kind. As noted above, cookery books for ships' cooks had been produced for over 60 years. What is different is the specific creation of this manual for the cooks serving aboard the company's ships. It appears to be a

---

41 *Cookery Manual*, unpaginated, third to last page in manual.

42 Bartlett, IGLR, 92.

43 M. Elwood, "Fish for Dinner" & "Something New in Muffins," *The Star Weekly Magazine*, 25 April 1959, 49, 50-1, respectively.

new idea, at least for the company, and that it held an instructional purpose, besides listing recipes. The manual represents a clear understanding of proper nutrition and food preparation in maintaining healthy, effective and contented crews.

The Four Potential Inspirations for the *Cookery Manual*

Without documents detailing the manual's development we are left with the contemporary context to search for its inspiration. In the twenty years between 1930 and 1950 Canada experienced the Great Depression (1929-39) and the Second World War (1939-1945). Both events reduced the quantity of food to which Canadians had access, the former diminishing wages and thus access to food during the Depression, and the later limiting food through war time rationing. The Depression and the war effort on the home front underlined the need for proper food to maintain the health, and morale of workers and warriors. The Canadian government became concerned for the nutrition of its citizens, beginning in the 1930s. As Ian Mosby writes, from 1939 into 1948 the Canadian government took control of food supplies, and prices, and worked hard to shape the citizens' understanding of food, nutrition, and cooking.[44]

The four potential motivating forces for the manual include: the Canadian nutrition campaign launched in 1939 and accelerated during the war; Canadian and American navy cookery manuals employed during the Second World War; general cookbooks; and the labour/management relations in the post-war years.

The Fear of National Malnutrition

Nutritional science came into its own with the work of Casimir Frank, in 1912, who coined the word vitamine, which became the current term vitamin with a further understanding of food's chemical elements.[45] Advances in the 1920s and 1930s revealed the critical roles of vitamins A, C, B, E and K, folic acid, proteins and amino acids in maintaining and restoring health, and their contribution to healthy child development. Research revealed that proper amounts of each vitamin existed, with either too much or too little leading to health concerns.

The dearth of food in economically devastated homes during the depression was the first alarm for the state that nutrition was a national concern. The food given in relief filled stomachs but was usually of poor nutritional value.[46] By

---

[44] I. Mosby, *Food will Win the War: The Politics, Culture, and Science of Food on Canada's Home Front* (Vancouver, BC: UBC Press, 2014), 205-6.

[45] K. Carpenter, "A Short History of Nutritional Science: Part 3 (1912-1944)," *Journal of Nutrition* 133 10 (2003): 3023-32, https://doi.org/10.1093/jn/133.10.3023.

[46] E. Strikwerda, "'Canada Needs All Our Food-Power': Industrial Nutrition in Canada 1941-

1937, surveys in Canada revealed that a "malnutrition crisis" had gripped the country. In response, the Canadian Council on Nutrition was created.[47] In 1939, a survey of four major Canadian cities found only twenty percent of people ate meals with sufficient nutrition to meet the average demands on the body.[48] Forty percent were on the border of malnutrition, while the rest were submerged within it.

Two lines of thoughts existed among nutritionists.[49] One was that people did not know what was appropriate to eat in order to get the nutrition they needed. The other line of thought was that people, especially the poor, did not have money to buy the proper food. Another debate was over the right nutritional level. One side suggested that it was the level promoting optimal growth, while the other held that it was the level maintaining good health. During the war years the knowledge deficit view and optimal standard prevailed skewing the surveys, critics alleged, towards a poorer nutritional level among Canadians than actually existed.[50]

As the Second World War broke out, Canada (as did its allies) experienced a high number of rejections in the men who came forward to enlist. Poor nutrition was regarded as the principal culprit. Using proper meals the British government had reclaimed "729 out of 834…who had been rejected for military service," according to a 1941 editorial in the *Canadian Public Health Journal*.[51] To win a war the military and industrial workers needed to be as healthy as possible. The editorial went on to say that the health of Canadians was dependent on proper nutrition. This alarm gave Canadian nutritionists significant involvement in determining and monitoring the diets of soldiers and war workers.[52]

Eric Strikwerda found the national nutrition campaign for war workers received wide support across the country form both employers and workers.[53] The ability to get workers to eat better "on and off the job would reduce industrial wastage, increase productivity and efficiency, and bolster workplace

---

1948," *Labour/Le Travail* 83 (Spring 2019): 9-41, see 16, 19; G. Amyot, "National, Provincial and Local Nutrition Programs in Canada," *Public Health Reports* 58.21 (21 May 1943): 793-6.

47 Canadian Council on Nutrition, "A New Dietary Standard for Canada, 1949," *Canadian Journal of Public Health* 40.10 (October 1949): 420-6.

48 Amyot, "National, Provincial," 793. The cities were, Halifax, Quebec, Toronto, and Edmonton.

49 Mosby, *Food Will Win*, 23-33.

50 Mosby, *Food Will Win*, 186-9.

51 Editorial, "The Need for Action in Nutrition," *Canadian Public Health Journal* 32.6 (June 1941): 317-8, see 317.

52 Mosby, *Food Will Win*, 16.

53 E. Strikwerda, "Canada Needs," 10, similarly, there was wide support for the price controls and rationing, Mosby, *Food Will Win*, 85-9.

morale…."[54] But many employers placed the onus on the worker and their family to educate themselves, relying on the nutritional programs offered through local health authorities.

Nutrition research by 1941 had shown that it was not just an attractive meal that increased morale it was the chemical elements in food that impacted the person's psychological outlook.[55] Good nutrition fed the body and the mind, helping the person to think and feel better. The Nutrition Division of the Pensions and National Health Ministry [later National Health and Welfare] was established in 1941, to further public education on nutrition, via local health authorities.[56] The Industrial Branch was responsible for inspecting and assisting war industries with their workplace nutrition initiatives.[57]

War time rationing began in Canada as some food items were sent to support Britain and others went to the troops. Milk was in short supply by 1941, meat was hard to come by and grapefruit juice, a cheap source of Vitamin C, was no longer available in 1943.[58] These shortages were addressed in the nutritional program by alerting the public to suitable substitutes. L. Pett, Director of Nutrition Services in the Federal government, called for increased agricultural foodstuffs production required to have balanced nutritious meals.[59] He championed public education on nutrition across the nation. This included not only the most appropriate foods, but information about food storage and cooking to maintain the nutrients. The first set of Canada's Food Rules (the food guide's forerunner) was published in 1942.

Much of this education, Strikwerda notes, was aimed at women, who held the traditional role of household food manager. The information assisted them in purchasing food, preparing it to preserve its nutritional value, and serving it so their family ate it.[60] To this end the government developed films, radio broadcasts, billboard ads, flyers, exhibits, and ran articles in daily newspapers

---

54 Strikwerda, "Canada Needs," 10.

55 Strikwerda, "Canada Needs," 18.

56 Strikwerda, "Canada Needs," 19; Editorial, "An Important Development in Nutrition in Canada," *Canadian Public Health Journal* 32,12 (December 1941): 621-2.

57 R. Goodhart and L. Pett, "The War-Time Nutrition Programs for Workers in the United States and Canada," *Milbank Memorial Fund Quarterly* 23.2 (April 1945): 161-79, see 171, https://doi.org/10.2307/3348248.

58 Editorial, "The Canadian Nutrition Program," *Canadian Journal of Public Health* 34.1 (January 1943): 38-9; D. Edwards, "Wartime Rationing 1939-1945: Eat Hash and Like it!" *Fairview Historical Society* (10 November 2020), https://fairviewhistoricalsociety.ca/wartime-rationing-1939-1945/; R. J. MacRae, 2023, "Lessons from WWII," Food Policy for Canada: joined up food policy to create a just, health promoting and sustainable food system, https://foodpolicyforcanada.info.yorku.ca/goals/goal-2/demand-supply-coordination/wwii/.

59 L. Pett, "Applied Nutrition." *Canadian Journal of Public Health* 34.1 (January 1943): 1-5.

60 Strikwerda, "Canada Needs," 20.

and columns in magazines oriented to women. Women's organizations across Canada took up the call, providing talks and campaigns to improve nutrition in their communities.[61] A focus on providing better eating areas and canteens in factories would further insure proper worker nutrition.[62] Even with these efforts, research over a two-year period discovered that workers were not eating enough fruits and vegetables, nor drinking the proscribed amount of milk.

Between mid-1941 and the end of 1944, the Industrial Branch had surveyed the canteens, eating areas, food served, and food brought from home, in 584 war industry sites in Canada. Twenty-five sites had their own dietician, 170 a food manager, 475 had some form of canteen. They reported "numerous cases of improved morale, of averted strikes, and of lessened frequency of accidents…."[63] Yet, the lack of controlled research on the impact of proper nutrition troubled Goodhart and Pett, who reported these findings.[64]

Comparing the surveys on food nutrition of 1942, 1943 and 1944, Goodhart and Pett reported some improvements. Men were consuming better meals, but female workers did not see the same level of improvement. Though the percentage of meals listed as poor did decrease over time, more workers still ate poor or fair meals, rather than ones considered good.[65] Much work remained to improve the majority of Canadian workers', and their families' nutrition.

Post-War Nutrition and Labour/Management Relations

During the war the nutritional push guaranteed employers that better nutrition would provide increased output, fewer labour issues and more profit. This promise persisted as employers shifted from war to peacetime production.[66] Goodhart and Pett declared that the federal war time program was to be made available to all industries after the war, and "to summer camps, small institutions, and public eating places."[67] Provincial governments established their own nutrition divisions within their health related ministries during the late 1940s and into the 1950s.[68] The tide of concern for the workers'

---

61 Strikwerda, "Canada Needs," 21; L. Pretty, "Educational Techniques for Nutrition," *Canadian Journal of Public Health* 34. 3 (March 1943): 121-4.

62 Strikwerda, "Canada Needs," 23.

63 Goodhart and Pett, "The War-Time," 174; "The Nutrition Movement in Canada," *British Medical Journal* 2. 4311 (21 August 1943): 235-6.

64 Goodhart and Pett, "The War-Time," 178.

65 Goodhart and Pett, "The War-Time," 175.

66 Strikwerda, "Canada Needs," 29-30, 32.

67 Goodhart and Pett, "The War-Time," 179.

68 Strikwerda, "Canada Needs," 40.

nutrition and the relation it had with efficiency, greater output, less discontent and more profits, pushed the agenda forward.

Worker's engagement in the nutrition programs was influenced by food availability and cost, along with habitual and cultural preferences. Complaints grew that work dining facilities, including food, made available by management were not good enough. The focus on good food played into the unions' hands as they used it to pry more out of management during negotiations in post-war industrial disputes.[69]

After the war, perspectives on both the economic influences on nutrition and the nutritional standard began to shift.[70] With price controls removed, food prices jumped, thereby putting the optimal food standard beyond the poor and much of the working class. Suggestions for returning to a Depression era diet were roundly rejected by the public. Access to better food was demanded, becoming a political issue and encouraging the growth of social welfare programs, such as the Family Allowance, in 1944. The optimal standard was challenged as being set too high, and that a different approach was needed. In 1945, the Canadian Council on Nutrition adopted a view of nutrition that included over nutrition, malnutrition and optimal nutrition (though at a lower level). The idea that education was at the root of poor nutrition rather than income was dethroned in the mid-1950s.[71]

Nutrition researchers and practitioners became concerned about the excessive diets in affluent western cultures.[72] The increased intake of milk, meat, eggs, sugars, saturated fats, and enlarged portion sizes were leading to obesity and significant diseases, such as atherosclerosis, and diabetes. This underlined the idea that it wasn't an abundance of "good" food, but the right portions within the overall diet.

The Canadian Council on Nutrition's 1949 food guide was considered a "scientific basis for planning food supplies for individuals or groups."[73] It was to assist in calculating the nutrients required by those being fed to maintain their health.[74] It provided charts for the necessary daily caloric intake, and the

---

69 Strikwerda, "Canada Needs," 28, 36-7.

70 Mosby, *Food Will Win*, 164-80.

71 Mosby, *Food Will Win*, 187-8, 202.

72 K. Carpenter, "A Short History of Nutritional Science: Part 4 (1945-1985)," *Journal of Nutrition* 133 (2003): 3331-42, https://doi.org/10.1093/jn/133.11.3331; Editorial, "Two Forgotten Aspects of Nutrition," *Canadian Journal of Public Health* 36, 9 (September 1945): 374-5; E. McHenry, "Confusion and Stupidity in Nutrition Education," *Canadian Journal of Public Health* 40. 6 (June 1949): 270-4.

73 Canadian Council on Nutrition, "A New Dietary," 420.

74 Health Canada, *Canada's Food Guides From 1942 to 1992* (Ottawa, ON: Health Canada, 2002), 9-11.

amounts of protein, calcium, several vitamins. Children's nutrition was given by weight, while for adults it was given by weight and whether the person's daily activities were mainly sedentary, moderate, or heavy. The food groups were milk, fruit, vegetables, cereals and bread, meat, fish, frequent meals of liver, and eggs and cheese. Iodized salt was recommended as was vitamin D for children, pregnant women, and nursing mothers. A suggested week's menu for three meals a day was included along with a chart on food nutrients.

Cookery Manual and the Nutrition Program:

Canadian nutritional war time programs clearly influenced the *Cookery Manual*. This is seen in the nutrition information provided and the repeated call to use nutritious foods, and cooking them in a way that preserved their nutritional value. Vitamins A, B1 (Thiamin), B2 (Riboflavin), Niacin, C, and D are described and the foods which contain them are listed. It also details the importance of proteins for both building and repairing the body. Foods containing the minerals calcium, iron and iodine and their role in good health are provided. Starches, sugars and fats as well as water intake are discussed. These vitamins and minerals were the same which received the attention of researchers and clinicians in the 1940s.[75]

Food variation across the week and a variety of food colour and textures is encouraged to entice the seamen to eat. Unlike the food guides, milk is not a separate category but appears with cereals, cream soups and in puddings. As with the Food Guide, fish is to be served once a week, and liver (along with beef kidney) were encouraged as "they are high in minerals and vitamins." Of course, what was actually chosen from among the manual's suggested items was left entirely to the cook.

The manual also stresses the impact of proper cooking, both on the company's bottom dollar and on the crew's ability to work to their full capacity. The efficient cook ordered and used food effectively to enhance the crew's physical health and morale. It echoed the war time nutritional program's promise of worker efficiency, greater output, less discontent and more profits.

Gordon Leitch's philanthropy included a camp for disabled children, the Navy League, and serving as a board member for the Toronto Western Hospital.[76] At multiple points he was certain to have been exposed to the importance of nutrition. During the Second World War Leitch experienced the Federal nutrition and war workers' efficiency messages. His wife, Hilda,

---

[75] F. Moog, "Vitamins Work," *American Scholar* 16. 3 (Summer 1947): 315-24; L. Harris, "All the Vitamins." *British Medical Journal* 2. 4530 (1 November 1947): 681-4; "Treatment of Deficiency Diseases," *British Medical Journal* 1. 4564 (26 June 1948): 1247-8.

[76] Chamber of Marine Commerce, "Canadian ships fly."

received the war time nutrition and rationing information from the Division of Nutrition. An innovator in other areas of his business, it is not a stretch to see Gordon Leitch wanting to adopt healthy, good quality food for his own crews. It is quite likely that the nutritional drive served as an important incentive to develop the *Cookery Manual*.

Cooking in the Navy

Sandy Gow explored the feeding of sailors in the Royal Canadian Navy (RCN) during the Second World War.[77] Using official records and interviews with navy galley personnel and sailors he presents a picture of an uneven situation in terms of food quality and food prep skills, not unlike on merchant shipping. When the war began a recruit with any form of prior experience in food handling was destined for a ship's galley, though most cooks had neither baking nor cooking experience. It wasn't until much later in the war that training of cooks was instigated.

What the new cooks did receive was the *B.R. 5, the Manual of Naval Cookery*, published by the Royal Navy in 1936, and adopted by the RCN in 1937.[78] This pocket-sized resource "was meant to be a cook's version of sacred scriptures."[79] It had eight sections. The first, entitled "General Instructions," covered the importance of a clean food preparation area, machines and cooking utensils.[80] It detailed the galley staff organization and its responsibilities, galley safety and several ways to cook food. Also covered were the diseases of meats and fish, dietary food values, carving of meat and meal service. The second section focused on cooking small quantities.[81] The longest section at fifty-eight pages was on mass quantity cooking for the general mess (the ship's crew).[82] This section began with detailed, strict instructions on weighing ingredients to ensure they aligned with the ration assignment for each mess. The Admiralty claimed that the cooking instructions prepared food for large numbers in a "simple and efficient manner."[83] The cooking method for each type of meat, vegetable and tinned good was described with raw ingredients, and finished items' weights or depth in the pan. During World War II, men serving as cooks aboard any British naval vessel received basic cooking skill training at the

---

77 S. Gow, "'Pusser grub? My God but it was awful!' Feeding the Fleet During the Second World War," *Canadian Military History* 25. 2 (2016): 1-44.

78 Admiralty, *B.R. 5 Manual of Naval Cookery* (HM Stationary Office, London; U.K., 1936). The Admiralty's first *Handbook of Naval Cookery* appeared in 1914.

79 Gow, "'Pusser grub,'" 5.

80 Admiralty, *B.R. 5*, 5-42.

81 Admiralty, *B.R. 5*, 43-93.

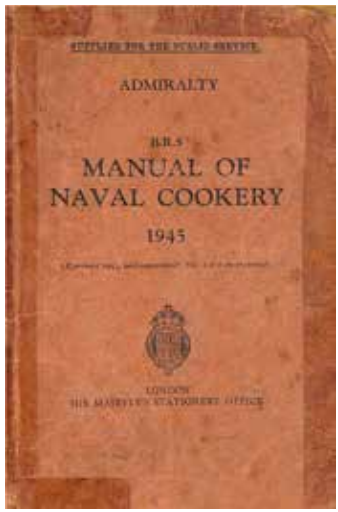
82 Admiralty, *B.R. 5*, 94-152.

83 Admiralty, *B.R. 5*, 94.

Royal Navy Barracks, Chatham.[84]

B.R.5 held eighty-nine recipes for meats, vegetables, eggs, and tinned goods. Twenty-four soups were described along with thirty-eight different sauces. The largest number of recipes went to sweets (sixty-three), though ten of them were forms of custards, five for desserts based around apples and four around plums.

Sections four, five and six dealt with spices, condiments and seasonings, invalid cooking, and field cookery, respectively.[85] These three sections covered only eighteen pages. A miscellaneous section covered precautions when using tinned foods, ship-made items, the pickling of meat, seasonal food, and some hints on cooking; all in seven pages. The final section was devoted to bread making, detailing making dough and yeast, required ingredients, and oven management.



As for the menu, meal suggestions appeared in the sections on cooking small quantities and for the general mess. In the index, specific meals were listed under the headings breakfast, dinner and supper, along with the headings, vegetables, soups, sauces and sweets. Using the index a cook could select breakfast, dinner, and supper main courses, adding in vegetables, soups or salads, and sweets for dinner and supper to build the required weekly menu. The general mess recipes were for 100 men, though occasionally up to 500.[86] Recipes were simple, with short instructions and few ingredients. One example was the Braised Kidney and Potatoes, for 100 men, involving eighteen pounds of braised kidney and 38 pounds of steamed and salted potatoes.[87] Another meal was pork brawn, or head cheese, "a jellied preparation of the chopped meat from a boiled pig's head."[88] In 1941, it was found that Canadian sailors were not being properly fed, some even showing symptoms of malnutrition. The ration amounts were adjusted, increasing their fresh and canned milk, and canned fruit or juice

---

84 R. H. Darwall, Photographs, Naval Cooking School, 1940. Imperial War Museum, A 2238, and A 2240.

85 Gow, "'Pusser grub,'" 5; Admiralty, B.R. 5, 153-70.

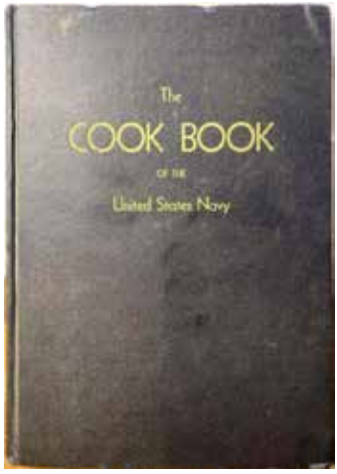
86 Admiralty, *B.R.5*, 98, the fried eggs recipe calls for 500 eggs, based on two per man, and notes that a 1,000 eggs (that would be for 500 men) take eight minutes to boil in the proper large strainer.

87 Admiralty, *B.R. 5*, 103.

88 Gow, "'Pusser grub,'" 5; Admiralty, *B.R. 5*, 172-3.

amounts, with a reduction in jam.

As with the *Cookery Manual*, the *B.R. 5* needed trained cooks to make it work. A Canadian 1943 reprinting of *B.R. 5* held six appendices listing the courses and tests, to become cook assistant, a cook, an officers' cook, or a warrant cook, and the instruction of those who helped in the galley.[89] Cooks had pre-assignment training ashore for thirteen weeks. Written and oral testing accompanied food preparation and cooking demonstrations, which were rated by a set of adjudicators. A navy cookery course was established in June 1944, with preliminary training at Central Technical School in Toronto, followed by galley service at HMCS *Cornwallis*.[90] Another training school was opened in Halifax for petty officers and warrant cooks. Stewards were given three weeks on-the-job-training, serving in an officers' mess. This signals the Canadian navy's efforts to improve the quality of cooks sent to sea by war's end.



With *B.R. 5* recipes listing ingredients for 100 men cooks had to adjust amounts to fit the actual number of seamen fed. The weekly menu was checked by the Commanding Officer and a sick bay attendant if one was aboard. The ingredients would then be provided from the storeroom in time for the preparation of each meal. Records of ingredients and weights for each meal were kept by the Accountant Officer.[91] Any food returned as inedible or poorly cooked also had to be reported.

By 1945 the American Navy's *Cook Book* contained 434 pages.[92] The latest nutritional information was incorporated, with all recipes tested for taste, nutrition, and practicality. The manual dealt with food preparation, sanitary food handling, nutritional values of foods, planning menus, and information on canned, dehydrated and frozen foods. It contained 400 pages of recipes for breakfast, soup stock, fish, beef, veal, mutton, pork, poultry, vegetables and sauces. It described how to bake bread, pastries and make desserts. A 1930

---

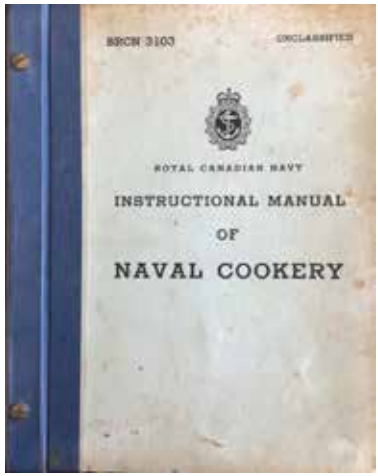
89 Admiralty, *B.R. 5*, 196-208.

90 G. N. Tucker, *The Naval Service of Canada: Its Official History, Vol. 2 Activities on Shore During the Second World War* (Ottawa, ON: King's Printer, 1952), 311.

91 Admiralty, *B.R. 5*, 8-9, 94.

92 US Navy, *The Cook Book of the United States Navy, Revised 1945* (Washington, DC: United States Government Printing Office, 1945).

article describes the galley aboard USS *West Viriginia*, for its crew of 1,300.[93] The writer, its chief boatswain, recites the vast amounts of food items that went into the daily meals and praised the cooks for providing excellent fare. The appreciation appears justified by Gow's interviews of Canadian sailors praising the American navy rations and cooking, over the Canadian navy's and most certainly over the British navy.[94] One interviewee told Gow that the Royal Navy diet "was designed to keep a man alive, but not much more."[95]



William Pugsley's account of serving in the RCN during the war mirrors Gow's findings.[96] Pugsley recalled a sparse diet lacking in fresh meat, fruit or vegetables. Limited supplies meant competition between the messes to get what was available, leaving some with less. Sailors in the Canadian navy openly expressed their displeasure with their meals. They refused to eat mutton, causing it to be thrown overboard, shortly after its arrival.[97] Cooks who did a poor job were also threatened with being thrown overboard. Cooks who could bake, especially bread, were prized and appreciated by the crews.[98] RCN cook A. W. Burns took a copy of Canada Packers' *Bakery formulae tested and approved by the Bakery Research Laboratory* to sea with him.[99] A three ring binder, it contained various recipe sheets, dated from 1941 to 1943. Burns baked pies, sweets, doughnuts, and cookies, among other dessert items, for an unknown RCN crew.

As the war came to an end Pugsley thought the food aboard ship would improve. His major criticism was not over the food available, but the cooking of it that turned food into "taste[ing] like evacuees from a jute factory."[100]

---

93 J. Thompson, "Feeding the Crew of a Battleship," *Scientific American* 143. 6 (December 1930): 443-45.

94 Gow, "'Pusser grub,'" 17.

95 Gow, "'Pusser grub,'" as quoted on 19.

96 W. Pugsley, *Saints, Devils and Ordinary Seamen: Life on the Royal Canadian Navy's Lower Deck*. (Toronto, ON: Collins, 1945),10, 47, 194.

97 Gow, "'Pusser grub,'" 19.

98 Gow, "'Pusser grub,'" 34-5, 20-1.

99 E. Driver, *Culinary Landmarks; A Bibliography of Canadian Cookbooks 1825-1949* (Toronto, ON: University of Toronto, 2008), 843.

100 Pugsley, *Saints, Devils*, 232.

With time, he posited, people assigned to the navy's galleys could be properly trained, improving meal quality. He hoped that menus would be improved, and noted that one ship even allowed the crew to create menus. The RCN issued *B.R.C.N. 3103: The Instructional Manual of Naval Cookery*, at the end of 1947, followed by an enlarged recipe manual in 1948.[101]

One other cookery manual can be briefly explored for the purpose of comparison, it is the 1943 United States' *Army Food and Messing*, compiled from the eight official publications issued by the United States army during the first years of World War II.[102] The 450-page book contained 311 recipes. Detailed descriptions of cooking techniques, food handling and storage, and kitchen management, for garrison and field kitchens, prepared the cooks to run their kitchens and cook the meals. It contained extensive discussions on baking and the butchering and cooking of meats, fish and poultry. Twelve pages addressed nutrition and menus, reminding the cook that proper nutrition was critical to good health, but stressing that a good diet, "must first be palatable. Good cooking and pleasing flavour, therefore, are important for good nutrition."[103] The section offered clear steps to plan a nutritious menu for a day, followed by a three page list of variations, both in cooking method and food items, for a one day menu. A section on sanitation covered food related diseases, disposal of waste, cleaning utensils, inspections, water sterilization, and control of pests. The volume ended with a "table of provisions per man per meal," a series of tables ranging from liquid measure conversion to oven temperatures for different foods, and a "minimum standard ten-day menu." Cooks in the United States Army were trained in both cooking and fighting. After 1943, with the invasion of Sicily, the number of troop replacements required meant that trained cooks were placed in combat units, where need was critical. This resulted in meals being prepared by unqualified cooks who only had a copy of *Army Food and Messing*. The number of trained cooks also declined as recruits were trained in combat and not culinary arts.[104]

Influence of Navy and Army Cookbooks:

The five cookery manuals explored above held a lot in common, in terms of their layout, and contents. They had sections explaining basic cooking

---

[101] Driver, *Culinary Landmarks*, 894, 902, respectively; "The Royal Canadian Navy Recipe Manual," http://www.forposterityssake.ca/RCN-DOCS/RCNRECIPES.pdf.

[102] US Army, *Army Food and Messing: The Complete Manual of Mess Management*, 2nd ed. (Harrisburg, PA: Military Service Publishing Limited, 1942).

[103] US Army, *Army Food*, 32.

[104] R. Palmer, B. Wiley, and W. Keast. *The Procurement and Training of Ground Combat Troops* (Washington DC: Center of Military History, United States Army, 1991), 374-96.

knowledge, such as diverse ways to cook meat and vegetables, sanitation in the galley, the preparation of basic dishes and food ordering and storage. While brief these sections reveal the manuals' effort to either remind or instruct the cook. They all set high expectations, either demanded outright, or through more subtle prompting, that the cooks would rise to the challenge, and use the book assigned them.

The 1949 dietary standards called for particular amounts of calorie intake for men at different weights engaged in sedentary, moderate, heavy and very heavy workloads.[105] Neither the *B.R. 5* nor the *Cookery Manual* discussed the different nutritional needs of crew members either by their weights or under different work conditions. Only the US *Army Food and Messing* manual talked about the need to balance the calories and nutritional values for soldiers involved in different activities, such as combat, heavy fatigue work, or on exercise, versus those involved in clerical, or light duties.[106]

Instructions for butchering meat appears in the *Cookery Manual* and the US *Army Food and Messing*, as it does in the 1894 *Cookery for Seamen*, noted above, but not in the navy cookbooks. The navies appear to have shipped meat in cuts not requiring refrigeration or butchering skills. The older, *Cookery for Seamen* dates from the time when live animals were kept aboard ship, and it was expected that cooks could raise, slaughter and butcher them. For post-Second World War freighters with refrigerators, sides of meat made sense as they were cheaper than purchasing the smaller cuts. The *Cookery Manual*'s butchering instructions are (no pun intended) bare bones compared to the detailed US Army instructions. Both have similar skeletal diagrams and locations for particular cuts. The army manual has more extensive coverage on all points covered than the other cookery manuals. The *B.R.5* and the army manual contain forms and instructions for their completion, while the *Cookery Manual* does not provide any forms for record keeping, or ordering.

The *Cookery Manual* does not have the same safety concerns regarding the galley machinery as the *B.R. 5*. The manual, the navy cookbooks, and the *Army Food and Messing* all stress galley cleanliness. The *Cookery Manual* and the US Navy and Army cookbooks discuss galley staff cleanliness, while the *B.R. 5* covers this in one sentence.

The *Cookery Manual* does not contain recipes for preparing a variety of dishes listed under the menu suggestions, such as various egg dishes. The navy cookery manuals spelled out how to prepare different egg dishes. It appears that the *Cookery Manual*'s creators assumed their cooks would know how to prepare these options.

---

105 Canadian Council on Nutrition, "A New Dietary," 422.
106 US Army, *Army Food*, 35-6.

Lt. Jack Leitch's five years in the RCN would have exposed him to *B.R 5*, and the need for trained cooks. His experience could only have served to foster his support for improving food quality and the skill of cooks, to provide better meals for those working on Upper Lakes ships. While Robert Angus did not serve in the RCN his time afloat on the lakes made him familiar with the quality of food and cooks on freighters.

Similarity to Contemporary Cookbooks

Elizabeth Driver asserts that, "Most pre-1950 Canadian cookbooks were produced outside of the conventional publishing realm."[107] Companies involved in processing food, making kitchen appliances and ware, and women's groups raising funds for their church or other community projects were the prime source for cookbooks. The Depression saw cookbooks developed, along with recipes in magazines and newspapers to help people deal with food shortages. During the war over 200 cookbooks appeared to assist in the adjustment to rationing and food substitution, especially for meat and sugar substitutes.[108] As with the government's nutritional information, most of these cookbooks were aimed at women, in their role as housewife or homemaker.[109] An example is found in Margaret Rees' *Tasty Meals for Every Day*, promoted by Maple Leaf Products, 1938.[110] On the first page Rees addresses her audience as the housewife. Rees focuses on cooking different cuts and types of meat, with basic instructions on baking, and pastry making.

In the *Cookery Manual* the instructions are for the ship's cook, who traditionally were men, though in the late 1940s women did serve in the steward's department and some were cooks. We do not know if any women

---

107 Driver, *Culinary Landmark*s, xix.

108 Mosby, *Food Will Win*, 133-42; General Foods, *Recipes for Today* (Toronto, ON: General Foods Corporation,1943); "Sugarless Recipes," *The Sealtest Food Adviser, May June 1942* (New York: Sealtest, Inc., 1942) ; *Purity Cook Book* (Toronto, ON: Purity Flour Mills Ltd., 1945); *Ration Recipes* (Montreal, QC: Robin Hood Flour Mills Ltd.,1943); *Economy Recipes for Canada's Housesoldiers* (Toronto, ON: Home Service Department Canada Starch Company, 1943).

109 Driver, *Culinary Landmarks*, xx.

110 M. Rees, *Tasty Meals for Everyday* (Toronto ON: Canada Meat Packers, 1938), 2, 26-27. It contained 97 recipes. See Driver, *Culinary Landmarks*, 757.

were serving as cooks aboard Upper Lakes' ships in the late 1940s. The manual uses the word "he" in two places. One concerns the cook's important role: "he is making a substantial contribution."[111] The other is found in the section on food handling, noting, "if he is subject to" the diseases mentioned, he should not handle food.[112] It is otherwise gender neutral beyond these two occurrences. This neutrality is probably unconscious on the part of its author(s), who most likely saw the ship's cooks as male rather than female, a reflection of their 1940s context.

As already noted, the *Cookery Manual* stressed nutrition. Similarly, nutritional information appears in many of the cookbooks produced during the Second World War. The Women's Guild of the Halifax Co-operative Society had a whole chapter on a single day's adequate diet and vitamin sources.[113] Some invoked Canada's food rules, as in PEI's Women's Institute's *Cook Book of Home Recipes, Published in the Interest of Nutrition Work*.[114]

Cookbooks, for both domestic and professional use, hold assumptions about the readers' knowledge of food, food preparation and kitchen/galley machines and utensils.[115] In the list of ingredients, such abbreviations as c for cup, tbsp for tablespoon, qt for quart appear. Actions such as whisk, dice, and pound all assume that the reader knows the utensil needed, and how to use it. The instructions parboil, or boil, presume the reader knows the difference between them. The *Cookery Manual* does define several terms used in the baking section, such as liquids, dry ingredients, hard and soft flour, and fats in relation to baking. Terms such as saute, brush, beat, and mix lightly, appear without explanation. Thus, the manual assumes the cook knows what they mean, suggesting either the people hired to cook had at least a rudimentary background in food preparation, or the originator(s) did not realize that what they presented required a pre-knowledge of culinary symbols, terms, techniques, and foodstuffs.

B.R. 5 did use some abbreviations, such as lbs, and gal. Abbreviations did not appear in The *Army Food and Messing*, or the US Navy's cookbook. However, terms such as sift, beat, grease a hot griddle and whip were not described in any military cookbook. Of all cookery manuals, the *Army Food and Messing* defined, or described, the widest range of terms used in the

---

111 *Cookery Manual*, 1.

112 *Cookery Manual*, 49.

113 Halifax Co-operative Society, *Co-op Cookbook* (Halifax, NS: Women's Guild of the Halifax Co-operative Society, 1942).

114 Driver, *Culinary Landmarks*, 71; see also Women's Institute, *Cook Book of Home Recipes, Published in the Interest of Nutrition Work* (Charlottetown, PEI: Patriot Job Print, 1943).

115 G. Tomlinson, "Thought for Food: A Study of Written Instructions," *Symbolic Interaction* 9. 2 (Fall 1986): 201-16, https://doi.org/10.1525/si.1986.9.2.201.

process of cooking different foods, from cooking methods to utensils and kitchen appliances. Clearly the five manuals' various authors held a mix of assumptions about the cook they instructed.

Tomlinson notes that cookbooks often offer plating suggestions, for food presentation and what other foods it might be served with. Few serving suggestions appear in the *Cookery Manual's* recipes. One involves setting out a chocolate pie, "serve plain or topped with meringue or whipped cream." Another example is the plating of Salmon Loaf, "Serve hot with tomato sauce or cold on salad plate."[116] For the most part the cook or the stewards would determine how the food was served. They would hopefully blend colour, texture, and flavour, so as to make it attractive, as stressed in the menu planning section.

Post-war Labour/Management Relations

The final possible inspiration for the manual's creation centres on post-war maritime labour/management relations. Labour unrest, though present during the war, escalated in the post-war years, with 1946 seeing 135,000 Canadian workers involved in strikes across a wide range of industries, costing over 4.4 million working days.[117] The Great Lakes strike, in May 1946, was one of those work stoppages.[118] The Canadian Seamen's Union (CSU) called for a strike to get an eight hour day (down from 12 hours per day, seven days a week), without loss of pay. The CSU demands included it be the sole representative of seamen on Canadian vessels on the inland seas. The Dominion Marine Association (DMA), representing the Canadian ship companies, resisted the strikers, encouraging the authorities to use the Canada Shipping Act to arrest seamen who left their ships, or were enticing others to strike.[119] Tensions grew during the month long strike, to the point where the DMA wrote the Minister of Labour, Humphrey Mitchell, accepting the eight hour day as soon as the Labour Board allowed it, refusing to deal with the CSU, and offering the seamen their jobs back if they returned to work immediately. If these demands were not met, the government could take over the industry and force the seamen back to work.[120] Outstanding issues would be settled by a government appointed commissioner, or commission. Robert Angus, representing Upper

---

[116] *Cookery Manual*, 67 and 64, respectively.

[117] "Labor Strife," *Globe and Mail*, 2 January 1947, 4; "40,000 in Dominion Idle Through Strikes," *Globe and Mail*, 28 May 1946, 1.

[118] Kaplan. *Everything that Floats*,42-46. The strike ran from 27 May to 22 June 1946.

[119] D. O'Leary, "Involves 5,000 Men on Lakes, at Coasts," *Globe and Mail*, 27 May 1946, 1-2. Section 261, of the Act made it illegal to impede navigation.

[120] D. O'Leary, "Ship Operators Reject Strike Settlement Plan," *Globe and Mail* 19 June 1946, 1-2.

Lakes, did not support the DMA's approach, and negotiated separately with the CSU to end the strike for the company's vessels.[121] With the breakdown in negotiations the government stepped in and initiated the eight-hour day, allowed for a system wide vote over union representation and a commission to settle other issues. The agreement between CSU and Upper Lakes allowed its ships to return to service and escape government control.

Someone wrote on the back of this image of a crew mess at meal time, "It's time for chow, and the crew makes the most of it. Food served Great Lakes sailors is known far and wide for its quality and quantity." Evidence would indicate this was not always the case. (Historical Collections of the Great Lakes, Bowling Green State University)

This was not the end of labour/management conflicts which (with CSU's collapse in 1950) culminated in a rough fight between ship owners and Hal Banks of the Seafarers International Union (SIU).[122] Having negotiated with

---

[121] D. O'Leary, "Seamen's Strike Over; Ottawa Operates Ships," *Globe and Mail*, 22 June 1946, 1.

[122] Kaplan, *Everything That Floats*, 71, 75. "Claim Seafarer Union Blackjacks Company," *Globe and Mail*, 3 June 1950, 1. The CSU was accused of harbouring communists, something deeply feared during the early cold war Canadian red-scare. The fact that the government and shipping companies, that had rejected the CSU's demands in 1946, encouraged the SIU smacks of retaliation against a union that had won major concessions. SIU went after the Upper Lakes & St. Lawrence Transportation Company.

the CSU in 1946, Upper Lakes may have tried to encourage crew loyalty to the company, in its fight against SIU's encroachment, at least in part by instituting the *Cookery Manual*, to provide better quality food and skilled cooks.

In 1946, the International Labour Organization (ILO) adopted the "Food and Catering (Ship's Crews) Convention (No. 68)" (FCSCC).[123] It held all unions belonging to the organization, in countries in which the Convention was in force, negotiate with ship owners (public or private) for "a proper standard of food supply and catering services for the crews of sea-going vessels."[124] Ship owners would control the regulating of food and water supplies, the layout of galleys and pantries, inspection of food, certification of galley personnel, their education, and any research done on food services afloat. The Convention called for the provision of increased "quantity, nutritive value, quality and variety" of food.[125] It called for appropriate training of galley stewards, with companies and unions deciding how that would be done.

The ILO also passed the Certification of Ships' Cooks Convention.[126] This called for the certification of competent cooks, after practical and written exams testing food preparation, knowledge of nutrition, menu planning, and ordering and storage of food aboard ship. Those serving as cook for two years prior to a country's passing of legislation to enact the convention, could apply for a certificate based on a satisfactory record. The certification of cooks appeared in the Canada Shipping Act, in 1948.[127] This is when Canada accepted the two 1946 conventions. The *Cookery Manual* made its appearance in the thick of these developments, possibly anticipating the impact. Where this training would occur was yet to be determined.

When was the *Cookery Manual* Created?

Without the documents pinpointing the date when the *Cookery Manual* was first created only a range of years can be hypothesized. With the

---

[123] International Labour Organization (ILO), "Convention concerning Food and Catering for Crews on Board Ship," 27 June 1946 (entry into force: 24 March 1957) [hereafter FCSCC], https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312213

[124] FCSCC, Art. 1.1.

[125] FCSCC, Art. 4, 2.2a.

[126] ILO, "Certification of Ships Cooks Convention," 27 June 1946 (entry into force: 22 April 1953) [hereafter CSCC], https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312214:NO.

[127] Sections 229 and 230, "Canada Shipping Act," *Revised Statutes of Canada Vol. 7* (Ottawa, ON: Queen's Printer, 1970), 6843-4. These sections were repealed in1985, see *Revised Statues of Canada* (Ottawa, ON: Queen's Printer, 1985), c.6 (3rd Supp.), s.23. The Act claims adherence to the two conventions, in section 232, making the previous sections redundant.

approved provisions and provision providers lists dated as revised in 1949, we can assume that 1948 was the very latest it could have been produced. With the national nutrition program and the war time rationing initiatives encouraging the public to improve nutrition the earliest date would likely be 1940. If Upper Lakes took on the wartime initiative to promote better nutrition within its workforce, then it could have appeared between 1943 and 1945. The similarities between it and the navy manuals of the Second World War along with Jack Leitch's RCN experience could indicate a post-war date for its production. The post-war labour disputes, Upper Lakes relationship with the CSU, and the ILO's 1946 conventions on food and cook training, certainly represent significant incentives to author the *Cookery Manual*. The nutritional information contained in the document matches that which nutritionists were advancing in the second half of the 1940s. The best estimate is that Upper Lakes generated the *Cookery Manual* for its cooks between 1943 and 1948, most likely in the years immediately after the war.

Conclusions:

Upper Lakes' *Cookery Manual* was the company's expression of its belief in the role of proper nutrition and food preparation in the health, efficiency, and morale of their crews. This reflected the nutrition program begun in the Depression and transformed during wartime to improve the diets of workers and warriors. It was a start in establishing better food preparation and nutritious meals aboard their lake freighters. It was the first set of standards for its cooks and stewards.

The manual has many similarities to the naval manuals, but pales in the number of recipes it contains. While it has a good outline of butchering, and far more on the cooks' personal cleanliness than the Navy cookbooks, its discussion of cooking techniques is less developed. The nutrition information is more thorough in the *Cookery Manual* versus the naval cookbooks, but less so than the Army *Food and Messing* manual.

It bears a resemblance to the cookbooks that were published for the land-based cook. The manual contains recipes and holds similar assumptions about the user's cooking and foodstuff knowledge. But the sections on butchering, sanitation and pest control aboard a ship, and the ordering of food supplies did not appear in any homemaker's cookbook.

The manual may have been inspired, at least in part, by a desire to reduce one area of union concern, namely the quality of food and shipboard cooking. The manual's production did coincide with the ILO's conventions pertaining to crew food and the need for trained cooks. Unless documentation is found, little more can be said

A number of questions remain about the *Cookery Manual*. Perhaps most obvious is, to what extent was it used across the Upper Lakes fleet? Another is whether other Great Lakes ship companies had similar manuals? If they did not, why not? If they did, how were they similar or different from this manual? The author has not found any examples of other cookery manuals in use in the 1940s on the Great Lakes. Elizabeth Davis' bibliography of 1,276 cookbooks, published between 1825 and 1949, does not list any cookbook specially designed for use at sea, with the exception of the naval manuals noted above. Nor are cookery manuals mentioned in the current literature about life aboard ships on the Great Lakes.

This article on the Upper Lakes & St. Lawrence Transportation Company's *Cookery Manual* represents a first effort to explore the early development of such manuals used in the galleys of freighters on North America's Inland Seas. As the sparse literature and the manual state, good food, properly prepared is essential for physical and mental health, thus promoting the efficiency and happiness of a ship's crew, and the company's bottom line. This is an area calling out for more research.

Thomas Malcomson is a maritime historian, with a focus on the social history of sailors, ships and ports. He lives in Toronto and is the current president of the CNRS.