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► **To cite this version:**

Chelsey Wong. Eating to survive: the overlooked reason for beef consumption in Japan, 1874-1912. 2023. hprints-04328118

**HAL Id: hprints-04328118**

**<https://hal-hprints.archives-ouvertes.fr/hprints-04328118>**

Preprint submitted on 7 Dec 2023

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## Eating to survive: the overlooked reason for beef consumption in Japan, 1874-1912

### Abstract

This article argues that there is ample and solid evidence for the role of health concerns in the rise of beef consumption in Japan in the latter part of the nineteenth century. It discusses how the social background, and, in particular, the cholera outbreak of 1886, boosted beef consumption. Fear of the effects of plagues led citizens in the Meiji era to seek out food that was, according to the science of the time, both nutritious and easily digested, leading to the development of a new set of values applied to food, including beef. Rather than seeing early beef consumption as only ostensibly medicinal, or as purely a matter of imitation of the West, as previous scholars have suggested, the author argues that beef consumption came to be perceived as urgently necessary for survival.

Keywords: Japan, Meiji, beef, plagues, cholera, health, diet

Hitherto the reasons for Japanese beef consumption were attributed to Westernization: it was part of the process of Japan becoming “civilized” in the modern era. Narratives associating beef and civilization (*bunmei kaika*) are common in primary and secondary materials and still appear in tertiary materials concerning Japanese food culture published today.<sup>1</sup> According to the accumulated research that has focused on elitist literature, the encouragement of the consumption of meat, and in particular beef, was politically motivated. The reason behind it was to “bolster the physique” of the Japanese population up to Western levels: to make the labour pool and the military forces more robust as national assets.<sup>2</sup>

However, this overall view needs to be modified to address another practical reason behind the necessity for the whole of Japan as a nation to stay, literally, strong. Cwiertka has

already shown that early beef consumption rested on the foundation of medicinal eating (*kusuri-gui*), and how an “association of the rising interest in Western civilization and its achievements, attributed meat eating with an aura of novelty and excitement.”<sup>3</sup> The measure of Japanese “weakness” in Cwiertka’s account rested on a perception of the comparative superiority of the western physique. Noma, on the other hand, has concluded that medicinal eating came to be supported by “reasons” (*kotowari*) based on western science, and that such supporting “reasons” were principally seen as a tool to eradicate a superstitious aversion to beef.<sup>4</sup> However, these accounts overlook a more direct connection between western science, beef consumption, and a more individual and immediate need than either the national interest or the eradication of superstition. Since this background of eating beef for practical medicinal reasons has been largely neglected, scholarship has overlooked not only the early development of beef eating, which would explain what quality of beef was considered preferable, but some scholars have even taken the further step of considering this medicinal eating to have been merely an “excuse” (*kōjitsu*) or a “nominal reason” (*tatemaie* or *meimoku*) for Japanese to enjoy meat, or even to the extreme of attributing the reason behind this encouragement to “a felt sense of physical inferiority.”<sup>5</sup>

Based on information gathered from news articles focusing on the daily activities associated with meat consumption and also advertisements for beef outlets during the Meiji period, this article would like to argue that although there is not enough evidence to discount the possibility that some Japanese might use medicinal eating merely as an excuse to enjoy meat, there were actual concrete health threats that fueled meat consumption during the period, and, more particularly, that beef was being specifically chosen as one of the best protections against these threats. By looking at this context and the practices associated with it, this article hopes to reevaluate the meaning of Japanese “weakness”, and to disclose the practical role played by western science as a means to overcome a concrete threat, rather than

seeing it as playing a merely symbolic role in the eradication of superstition. By examining the adoption of meat consumption in this broader context, this article also hopes to illuminate the background and details of Japan's "Westernization" in this respect.

From 1868 to 1912, for the 44 years of Meiji Tenno's reign, the situation of beef consumption in Japan was complex and diverse. As Higashiyotsuyanagi has shown, both those promoting meat consumption and those resisting it were vocal in the Meiji period.<sup>6</sup> On a national scale, some people were still resisting beef even into the Showa period.<sup>7</sup> While we can see one pattern of consumption during the Meiji period consisting of the consumption of beef just a few times in a year, at the same time we can also see patterns of daily beef consumption, and instances of beef being brought onto the dining table at home, co-existing with the often repeated anecdotes of beef needing to be cooked in the garden or outdoors.<sup>8</sup> Japanese consumption behaviors, whether beef was consumed only sporadically or daily, serve as an indicator of the rationale for the consumption. Having beef daily may remind us of the anecdote of Natsume Sōseki tracking his physical measurements, clearly demonstrating the ambition to boost his physique.<sup>9</sup> However, descriptions in advertisement show us other, more commonplace, reasons why Japanese people consumed beef in the Meiji period.<sup>10</sup> Due to the limits of space here, this paper will mainly focus on the way beef was consumed for medicinal reasons, which followed a more occasional pattern, and the relevant background to this form of consumption. The way the Japanese public was educated about what to eat and what to avoid is also highly relevant to this background. Before looking at this medicinal eating, we need keep in mind that what counted as "Western knowledge" to the Japanese did not remain unchanged; with updates in knowledge, food preferences also changed during the period.

## Medicinal Eating and Health Concerns

Well-known elite literature relating to meat promotion reveals part of the background to the necessity to consume meat. For example, we find the following in Fukuzawa Yukichi's *On Meat Eating* written in 1870,

Human beings, as the lords of creation, eat all of the kinds of food, including the fruits of grains, plants, and trees, the meat of birds, fish, and beasts. This too is a matter of naturally endowed disposition, and if one turns against this disposition and eats only meats, or again, eats only the fruits of grains, plants and trees, then without fail one will fall into a state of physical weakness, be afflicted by unexpected diseases and die. ... Since ancient times, our nation of Japan has engaged in agriculture, and people have taken the five grains as their staple food, with meat being eaten only rarely, giving rise to a an [sic] nutritional imbalance in peoples' bodies, which naturally produced many ill and weakened persons.<sup>11</sup>

Apart from the Kanagaki Robun's often-cited *Aguranabe*, an advertising flyer he wrote before 1871 is also worth mentioning.<sup>12</sup>

Since 1796, [cattle] were pasturing in *Herukerei no chi*<sup>13</sup> in Britain (to provide beef) only as complementary medicine for nourishing people's physical body. It is consumed by people from different countries and nothing else strengthens people so well.

Advertisements in newspapers from the 1870s onwards encouraging meat consumption routinely bring forward the purpose of staying healthy. "Nourishment" (*jiyō*) and

“strengthening health/recuperation” (*yōjō*) are keywords in the advertisements for beef and the people who consume meat are called *yōjōka*, a phrase combining *yōjō* with the suffix “*ka*” meaning “a person with a certain character or disposition.”<sup>14</sup> Figs. 1 to 4 in Appendix I show the health-related phrases found in advertisements for the beef business between 1874 and 1912. The descriptions in the advertisements reveal that their target audience are people who consume beef to avoid weakness, since, as Fukuzawa mentioned, a weak person could be “afflicted by unexpected diseases and die.” Apart from being recommended as a preventative, beef was also being provided to patients in hospitals, and recommended by doctors.<sup>15</sup> This also echoes the news articles reporting that beef soup was being purchased by the prefectural hospital in Osaka, which later started to produce its own soup, using three catty of beef to one catty of water, for its patients.<sup>16</sup> In Chapter 12 of *Aguranabe*, a *bushi* is recommended by a doctor, who had learnt western medicine, to consume beef. This *bushi* is depicted as having beef with this awareness in mind. In real life, however, it could be that patients might not know what they were having. In 1894, a lady in a viscount’s family was given beef as remedy for anemia by a military doctor. She was told that the meat was crane until after she had recovered.<sup>17</sup>

Advertisements also served as a medium promoting the health benefits of meat to the Japanese population. Fig. 5 shows an advertisement for beef soup and chicken soup from 1890. Its copy reads: “Sickening and weakening are unavoidable natural destinies. ... While medicine only helps to reduce germs, patients need to be supplied with nutriment to be strengthened against weakness.”

### **The Correlation Between Beef Consumption and Epidemics**

There is, then, ample evidence for a link between beef consumption and health concerns. The background to these health concerns becomes clear if we consider how closely this

consumption is related to the contemporary incidence of infections, and in particular cholera, a disease that threatened the Japanese population for decades and caused widespread deaths.<sup>18</sup> The same newspapers carrying the advertisements mentioned above were themselves a very important medium reminding people about the death toll from these diseases, and the need to stay healthy.<sup>19</sup> In this section, we will look at the correlation between beef consumption and epidemics suggested by three indicators: 1) the number of advertisement for beef businesses that refer to health concerns, 2) the number of cattle being slaughtered monthly in Tokyo, and 3) a case study of the fortune of a famous beef outlet business in the Meiji period: Iroha.

The cholera outbreak in the Meiji period, in 1877, was the first there had been since 1858.<sup>20</sup> The Sanitary Bureau of the Home Ministry announced “The regimen that each person should be aware of during the epidemic of cholera” (*Korera ryūkō no fushi kakuji chūi subeki yōjōhō*) on August 24 and notified other prefectures on August 27.<sup>21</sup> It mentioned that people who had strong stomachs and intestines were rarely affected, but that the weak were more likely to fall ill. It also reminded people to pay attention to what they consumed, to keep the digestive system healthy by not overeating and to be aware of food poisoning. In particular, eating raw food and overeating would cause stomach and intestine problems such as diarrhea, which would lead to infection or contagion. Anyone with light diarrhea should immediately seek help from a doctor and recuperate. This regimen also gave guidance about what food would be best to consume: grains, fresh beef, veal, mutton, and chicken. Duck, wild goose, and pork contain a lot of fat, so they are “not preferable.” This regimen was printed in the *Yomiuri shinbun* on September 1 and 3; in this way, the mass media helped to educate a public that had achieved a certain level of literacy.<sup>22</sup> The advice about paying attention to general health during a cholera outbreak was not new. In 1862, the magistrate’s office in Nagasaki had advised people “not to neglect health preservation during the cholera

outbreak,” and asserted the importance of practicing “a healthy regimen gently” because “those who failed would easily fall ill with cholera.”<sup>23</sup>

The bar chart in Fig. 7 shows the number of cholera patients and the number of deaths from cholera in the Meiji period. Basically, there were cases throughout all of the recorded periods. The most severe cholera outbreak in the Meiji period was in 1879, causing 105,786 deaths out of 162,637 cases. The second severe one was 1886, with 108,405 deaths out of 155,923 patients. The line with squares in Fig. 7 shows the number of advertisements for beef mentioning health concerns as described in Appendix I. The number of advertisements follows the course of the cholera epidemic until the end of the 1880s. In other words, at the very least, we can assume that up to that time, beef businesses were aware of the diseases, and, therefore, promoted beef as a means to stay healthy. In particular, a portion of the advertisements emphasized that beef products were being ordered by doctors and hospitals, as a way to promote the quality and effectiveness of beef in strengthening the body to resist the disease.

Beef as medicine was consumed in various forms. Apart from *gyunabe* and canned beef, pasté, miso, medicinal alcoholic drinks, pickles, various simmered dishes such as *Yamato-ni*, *Tsukuda-ni*, *Oboro-ni* and *Azuma-ni*, curry, soup, jelly, candy, peptone, essence, extract, powder and Musculosine were mentioned in the advertisements.<sup>24</sup> Street vendors (*tsujiuri*) selling stewed meat, including beef, on skewers were banned in 1876 in Tokyo for selling meat of unknown origin.<sup>25</sup> The official order on May 15, 1876 demanded that these street vendors return their licenses. However, we are not able to confirm how strict the ban was and if there were any illegal street vendors afterwards.



The consumption of beef remained very limited even after the severe cholera outbreak of 1879 in Tokyo. The first couple of waves of cholera did not affect the number of cattle being slaughtered tremendously. The cholera outbreak in 1886 appeared to have a more significant influence on the consumption of beef. Fig. 8 shows the number of cattle being slaughtered in Tokyo from 1875 to 1889; the difference before and after 1886 is obvious. The number of cattle being slaughtered per month in Tokyo up to the early 1880s did not appear to be affected dramatically. Only a couple of hundred cattle were slaughtered in Tokyo per month, except for in June 1882, but after 1886, it increased to average more than a thousand. This trend in consumption is also reflected in the early development of a very famous *gyunabe* restaurant chain: Iroha.

The line with circles in Fig. 7 shows the number of branches of Iroha in the Meiji period.<sup>26</sup> Iroha has been frequently used as a representative example of a prosperous *gyunabe* business, but accounts of its extent vary.<sup>27</sup> By looking at the information gathered from the advertisements, which serves as written testimony given by Kimura's Iroha directly, we can see that the beef business enjoyed a prosperous period but that it did not last very long.

There were few advertisements in the *Asahi shinbun* and *Yomiuri shinbun* in the early years of Iroha's business. The first outlet opened in December 1881 selling mutton from sheep bred on government-run farms.<sup>28</sup> There was still one outlet in 1882 selling beef and mutton in front of the gate of the Mita breeding farm, which was a governmental-run breeding farm located in Shiba-ku. In the advertisement, it also mentions that they expected the customers to come for the health benefits. In June 1885, Iroha opened another branch, and by the end of 1886, it had 5 outlets in total.<sup>29</sup> Shortly after the opening at the end of December, Iroha opened one more branch in January 1887.<sup>30</sup> In the advertisements for this new opening, Kimura, the owner of Iroha, mentioned the goal of opening 48 outlets in total. (The business of Iroha was not limited to *gyunabe*, but included restaurants, retail, and

wholesale.) In a sense, this goal represents Kimura's assumption that beef was being accepted by the Japanese and that he and his family foresaw this practice would continue. In October 1887, we see an advertisement listing 10 locations.<sup>31</sup> However, this momentum in beef consumption did not continue as expected. As Fig. 7 shows, the pace of growth started to slow down after 1888. Three more branches opened in 1888, two in 1889 and one in 1890.<sup>32</sup> Here Iroha beef business achieved its pinnacle in terms of the number of outlets; 1891 was a complicated year in which Iroha opened two more branches but closed three.<sup>33</sup> The advertisement on November 30, 1891 mentioned only one was closing, and two others would move to two different locations. However, those addresses were actually the addresses of two branches that had already opened. Although no other notice of closure can be found, in an advertisement in 1892, one more branch disappeared, and it is missing from subsequent advertisements.<sup>34</sup>

From 1893 to 1896, we do not see any advertisements in the *Asahi shinbun* and *Yomiuri shinbun* search results. On April 20, 1897, there was an advertisement about setting up a telephone at each Iroha outlet and a ryokan, and on October 6, 1899, there was an advertisement about the opening of Iroha no.20, without an advertisement about the opening of no.19.<sup>35</sup> (Here we have tried to avoid using its numbering system as it is not consistent.) In the advertisement in 1897, they adopted the system of once again using the term "mothership restaurant" (*honten*) but this restaurant shared the same phone number and address with the first. This mothership restaurant later became branch no.19 in the advertisement on October 6, 1899.<sup>36</sup>

The advertisement for the opening in 1899 was the last to list up the branches and mention the goal of establishing 48. The subsequent advertisements were much simpler, and the Kimura family appeared to be involved in other kinds of cuisine and in Japanese-style resort accommodation from the late 1890s. In 1903 an accommodation opened at the location

of branch no.19, sharing the same address with the first mentioned above.<sup>37</sup> On August 27, 1913, an article reported that Kimura's Iroha was bankrupt and in debt for 100,000yen.<sup>38</sup> Some outlets would be taken over by other beef businesses, and the article also mentioned the feasibility of others running a meat business using the Iroha brand.

Iroha has been frequently mentioned as a prosperous beef business in the Meiji period, to a degree that the situation may be overestimated. Beef businesses in the Meiji period were not as promising and prosperous as has been suggested. Two beef outlet owners committed suicide, in 1887 and 1902, and two outlets of Yonekyū, one of the top 5 beef business brands at the time, were seized by bailiffs in 1891.<sup>39</sup> In fact, Yokoyama reports that the net profit of beef butchers and retailers declined by a half after 1879 and there was a plummet in the number of beef businesses in 1881.<sup>40</sup> The business environment was tougher for business owners than scholarship has claimed. Iroha's prosperity was boosted by the outbreak of cholera in 1886, and we see significant growth in 1886 and 1887; the number of outlets rose from 2 in 1885 to 10 in 1887. However, from then on, the business did not grow as much as the Kimura family had expected.

To conclude, we have looked at the beef business, the number of cattle being slaughtered in Tokyo, and the number of beef advertisements related to health. The data for these three things strongly suggest that early beef consumption was closely related to the cholera outbreak of 1886. The example of a prosperous beef business – Iroha – shows that its prosperity was boosted by the epidemic as well. One may argue that beef had started to be promoted much earlier by the Meiji Government, as the Meiji Tenno started to adopt beef and mutton in Meiji in 1872. However, one should not forget the cholera outbreaks before Meiji; in particular, the severe one in 1858. Kanagaki Robun, who wrote *Aguranabe* to encourage the consumption of beef, also wrote a book called *Ansei korori ryūkōki* about the situation

during the epidemic in 1858. The Japanese elite was living with the aftereffects of the epidemics in the Ansei period, and there was the threat of cholera on the mainland of Qing.<sup>41</sup> Nevertheless, as we can see, early beef consumption was very limited. This is indicated not only by the number of cattle being slaughtered, but also by the fact there was a surplus of beef being donated to the poor and, in one case, to a prison up to 1880.<sup>42</sup> We have found a total of 11 articles about beef donation.<sup>43</sup> The amount of beef being donated varied with the donation; ranging from 36kg to 120kg. After 1880, articles about other resources being donated still appear, but there is no longer any mention of beef according to the search results.

### **Meat Consumption as a Substitute**

We have seen evidence showing that cholera boosted beef consumption in Tokyo. Aside from the well-advertised health benefits of beef, there is another reason for the increase. The source of the infection was water, so that it could be caught by eating fish. On October 1, 1879, the news reported that beef restaurants in Kyoto were doing good business because the import of sea fish was prohibited, only freshwater fish were available, and the consumption of beef was being recommended.<sup>44</sup> There were beef outlets selling the equivalent of four to five cattle's worth of beef in a single day.<sup>45</sup> On June 2, 1882, a temporary report issued by the Sanitary Bureau of the Home Ministry mentioned that two thirds of the patients in Yokohama were infected because they had eaten tuna sashimi.<sup>46</sup> The pattern of citizens' meat consumption also reflected people's awareness of the connection between cholera and fish. On June 26, 1886, the *Yomiuri shinbun* reported the influence of cholera on business.<sup>47</sup> The price of fish had gone down by 30% and there was a low demand. Tempura and sushi were unmarketable, shellfishes being the worst. While the price of eggs increased by 30%, and beef and fowls by 20%, they were in high demand. On September 5, 1890, the *Asahi shinbun*

reported that people were being careful not to consume fish since the cholera outbreak. Instead, they had fowls and beef as substitutes.<sup>48</sup> A police officer in 1912 explained that they realized that quite a lot of confirmed cases were associated with the consumption of raw Japanese anchovy, or sashimi made from tuna and bonito. However, they had no clue how these fish had become contaminated. It could have been in the sea, fishing grounds, riverbanks, or fishmongers. Since other types of fish might also get contaminated by the bacteria, avoiding fish was suggested to be a way to avoid cholera.<sup>49</sup> This paradigm of consumption – avoiding fish but consuming meat, including beef, as a substitute – can be observed from the Meiji period to the Taisho period.<sup>50</sup>

Unfortunately, there is not enough evidence to show when Japanese people started to avoid fish and turn to meat during the cholera period. However, this pattern may serve as one more hint to explain why meat consumption increased in the late Edo period.<sup>51</sup> In particular, not only the official notices recommending people to avoid fish and seafood, but also diaries and literature show that the Japanese were aware of the connection between cholera and fish consumptions, despite perhaps not being aware of the nature of the disease itself.<sup>52</sup> A couple of diaries recorded that there were rumors attributing cholera to poison released into the sea by foreigners.<sup>53</sup> To eat fish was to risk possibly fatal poisoning; sardines were avoided and the price of vegetable and egg increased in 1858.<sup>54</sup> Cholera terrorized Japan with its rapid lethality; this can be seen in the name the Japanese gave it: “three-days cholera” (*mikka korori*). Nevertheless, people who had this understanding might avoid a very fundamental protein source – fish and seafood – thereby further contributing to their weakness. These writings reveal how people’s fear of death provided a practical reason for meat consumption. Medicinal eating was not merely used as an “excuse” for such consumption; neither did it arise from a simple “felt sense of weakness.” In fact, apart from cholera, other plagues such as influenza and measles also struck in the Edo period, the influenza of 1716 also causing

widespread death.<sup>55</sup> Japanese people had highly practical reasons to practice medicinal eating.

### **Scientifically Influenced Food Preference**

So far, we have examined how beef consumption was associated with infections, especially cholera, and we have also seen how the avoidance of fish boosted meat consumption. As mentioned above, veal and beef were being recommended by the government as some of the best meats to consume in a health regimen. The practical reason behind the beef consumption as medicinal eating is crucial because it contributed to the primitive standardization of beef quality at an early stage of Japanese beef consumption. Earlier we looked at “The regimen that each person should be aware of during the epidemic of cholera” announced by the Sanitary Bureau of the Home Ministry in 1877. It advised people to “keep the digestive system healthy” because those “who have strong stomachs and intestines are rarely affected.” The “Outline of cholera treatment” (*Korera chiryōhō gairyaku*), which was written in 1877 by Dr. Erwin Baelz, who taught at the medical college of Tokyo Imperial University, advised people at the request of the Home Ministry to mind factors such as food that would harm the intestines and weaken the body.<sup>56</sup> These factors were not direct causes of infection, but people would easily get infected if their intestines were weak. The advice “not to harm the stomach and intestines” was repeated in official documents in the Taisho period as well.<sup>57</sup> Whether the food was digestible was a substantial concern to the Japanese. These official documents, educating the public about how to remain healthy during the epidemic, advised against eating food that was not digestible and recommended choosing what was soft and easily digested.<sup>58</sup> When it comes to meat, it is suggested to eat what is fresh and tender.<sup>59</sup>

Fig. 12 is a flyer titled “List of preventive methods for cholera” created by a commoner (*heimin*) in Tokyo. It was sold in Yokohama in 1886 during the cholera

epidemic.<sup>60</sup> White circles indicate the nourishing food that would be digested in two to four hours. The foods with black circles are considered to be indigestible as they take five to ten hours to digest. In point no.16, it says: “You should select whatever food is easy to digest to eat and try to avoid those that are not digestible as much as possible. As this table indicates, food that takes more than five hours to digest will harm your body. The reason is that the food will decay in your body with your body temperature, and this becomes the origin of various illnesses. And the ‘bad air’ (*akki*) released by the decayed food from the body combines with the ‘bad air’ in the air to become the origin of infections.” The reasoning was not scientifically accurate or up to date from the modern point of view, because the Japanese attributed the infection to putrid odors before the cholera bacteria was discovered in 1883.<sup>61</sup> However, the flyer serves as anecdotal evidence showing an awareness of the connection between infection and digestible food among Japanese citizens. Another indication of this awareness was the trend that we can observe from Fig. 1 to Fig. 4 in Appendix I: advertisements for and articles about shops or outlets of beef and beef products with copy related to medicinal benefits. There were more processed beef products, such as beef essence, jelly, extract, Peptone, etc. advertised in the late Meiji period. Some advertisements promoted this form of beef consumption as “adapting an artificial way to digest.”<sup>62</sup> When it came to beef that was tough, the demand for it as food was low, and one article described it as “not edible” (*shokuyō ni tekisezu*).<sup>63</sup>

Since, this beef consumption had a practical – medicinal – reason behind, it was based on scientific observation. In the early stages, it was simply a matter of the observation of flatulence and excreta. In 1874, an article published in the *Yomiuri shinbun* about preserving health explained that there was evidence that proved meat from fowls and animals was more digestible as it formed less excreta.<sup>64</sup> Flatulence released from the body was also considered. A reader’s opinion by Tsuji Rokuemon in 1875 mentioned that westerners did not release gas

as frequently as Japanese did.<sup>65</sup> He attributed this to the high consumption by Japanese people of indigestible vegetables such as burdock, tubers, wheat rice, etc. that would not form blood and flesh but passed as feces and gas. On the other hand, westerners consumed beef and meat and eggs that formed blood and flesh, so that their bodies were stronger and less of them fell ill.<sup>66</sup> This appears to have become a widespread belief within the Japanese elite, arrived at through the observation of Europeans living in the settlements.<sup>67</sup> Furthermore, the Japanese did not only passively receive knowledge: they also initiated experiments to find out what meat would serve them best in a comparative way. In 1883, Nagano prefecture implemented a human experiment, using three criminals who had been sentenced to death, to research into the comparative nourishment of beef, egg, and loach.<sup>68</sup> Each was given one nourishing food for a week before the execution and their bodies were examined through dissection. The result was that loach proved to be the best, then beef, and then egg. Although the setting and the standard of evaluation adopted in this experiment are not explained in the report, it showed an endeavour on the part of the Japanese to learn about the nourishing content of food scientifically. Another occurrence that showed a similar aspiration was that data was presented in newspapers accompanied by more scientific evidence, such as the nutritional content of different foods. For example, Fig. 13 shows an article from July 12, 1884 in the *Asahi shinbun* that described the nourishment (*jiyō shitsu*) provided by beef, mutton and pork in a table comparing the compositional content. Based on the scientific comparison, the article concluded that beef is the best meat. In this way, the background epidemic combined with the new scientific knowledge contributed to the formation of Japanese food preferences.

### **The Motivation Reflected by the Consumption Patterns**



Alongside the meat consumption associated with plagues explained above, descriptions found in the *Yomiuri shinbun* and *Asahi shinbun* associating meat consumption with nationalism appeared in the 1880s, urging people to consume meat more frequently, and starting to refer to meat (or beef) as a daily food. This appears to be the beginning of the process of medicinal beef consumption gradually transforming into daily consumption. For example, a reader's contribution titled "To cultivate the foundation of the nation" (*kokuhon o baiyōseyo*) in 1885 encouraged people to consume meat at least once every two days during winter.<sup>69</sup> This article pointed to the size of Japanese bodies, arguing that they were once bigger but gradually diminished as succeeding generations increasingly came to avoid consuming meat. In order to strengthen the military force to rival those of Western countries, it concluded, improving the physique was crucial. Other examples, such as an article introducing good beef sold by Nakakawa-ya, refers to beef as a daily food.<sup>70</sup> Selling beef at a reasonable price became a contribution to society.<sup>71</sup> This way of beef consumption, rather than having it medicinally only when necessary, is more related to bolstering the physique for the sake of the nation, as previous scholarship has highlighted. Tatsukawa refers to this as "nutrition-based nation building" (*eiyo rikkoku*).<sup>72</sup> As early as 1867, a proposal for animal husbandry suggested that soldiers especially should consume beef every day.<sup>73</sup> In order to achieve the standard of physique to best serve the nation, good daily nutrition was required. In this way, it is different from the paradigm of medicinal consumption, which entailed consumption of a certain diet only when necessary.<sup>74</sup>

One consumption pattern that shows Japanese beef consumption was more inclined to medicinal eating than to the nationalistic demand is that a significant number of beef restaurants turned into ice shops in summer and turned back to the beef business in winter. For example, in 1885, 47 ice shops turned into beef businesses in Hongō-ku.<sup>75</sup> This business model can also be observed from the Meiji period to the Taisho period. Beef restaurants did

not do much business in the warmer seasons.<sup>76</sup> This echoes the study of the consumption pattern of a family belonging to the consumer class in Osaka.<sup>77</sup> The family bought beef three times in 1875: between November and January. This pattern is reasonable not only because meat might go off quickly in summer, but also because it was indeed uncomfortable to have *gyunabe* next to a fire during summer back in the days before refrigerators and air-conditioning. Japanese people had to wait for advances in technology before turning to beef as a daily food. This foundation was not yet laid in the Meiji period.

## Conclusion

Hitherto scholarship about beef consumption in the Meiji period has asserted a strong association between that consumption and Japan's Westernization, focusing on the aspect of the government's desire to build up the nation in the face of potential threats from abroad. This overlooks the invisible but lethal enemy much closer to the individual Japanese citizen: disease. Since this side of the history has not hitherto been examined in depth, meat adoption has generally been considered as an "excuse" or a "nominal reason" and scientific knowledge perceived merely as a tool for breaking down superstition. As McNeil reminds us in *Plagues and Peoples*, the relationship between humans and infectious organisms has often been a decisive influence on social change, and, as Milward has asserted, "the Japanese felt they had something *useful* to learn from the West, especially in matters of science and technology" (my emphasis).<sup>78</sup> Japanese medicinal eating, and the urgent need to apply this practice in the face of epidemics, is a topic that is worth deeper study. As we have seen above, during the Meiji period, Japan was afflicted by cholera: a lethal threat, that killed thousands. Beef consumption, for medicinal purposes, was particularly boosted by the outbreak in 1886. Beef was introduced as superior to other meats in terms of nutritional content. Cholera, as an infection that spread by water, led to a decline in the consumption of fish and other seafood,

since their consumption was discouraged or even prohibited during the epidemic. Beef consumption was, therefore, further boosted as a substitute for fish and other seafood. The contemporary state of knowledge led the Japanese to be deeply concerned with how digestible a food was: the extent to which it would not weaken the stomach and intestines. Here, the preference for selecting tender beef appeared, as tough beef was considered inedible. Western science introduced a whole new set of values into Japanese thought in terms of food's nutritional content and its digestibility.<sup>79</sup> It was this newly-bestowed value that allowed beef to begin its ascent from defiling to valuable.

Both adopting of beef to boost the physique up to a level perceived as typical of westerners and the consuming of beef to ward off disease affected the frequency of Japanese beef consumption. However, there is a gap between the standard applied when measuring Japanese people's weakness in terms of the role beef could have in improving the physique and the standard being applied when this weakness related to resistance to lethal disease: the threshold between "strength" and "weakness" in the two cases is not the same. Apart from associating beef with novelty and excitement, there was a more serious and practical side to beef consumption: fear of death. Japanese people adopted the most advanced science available at that time in order to survive and to stay healthy. In this sense, perhaps the aspect of "Westernization" involved in the adoption of beef in Japan can be seen not as an end in itself but rather, almost as a by-product of concerns that had nothing to do with simply blindly imitating the West as has sometimes, rather patronizingly been suggested. Though later – in the form of "building up" the nation – beef consumption did become more a matter of seeking to rival the West through conscious imitation.

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<sup>1</sup> The opinion that meat, in particular beef consumption is associated to westernization can be seen in the materials published in the 21<sup>st</sup> Century. For examples of secondary scholarly materials, see Cwierka, *Modern Japanese Cuisine*, 33–34; Hashimoto, *Shokutaku no Nihon shi*, 206–7; Ishige, *Nihon no shokubunkashi*, 185;

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Kuboi, *Zusetsu shokuniku shuryō no bunkashi*, 136–41; for tertiary materials or materials for the general public, see: Hatanaka, *Fasshon fūdo, arimasu*, 14–15; Hatanaka, *Karisuma fu-do*, 45–9; Nagayama, *The Cultural History of Japanese Food*, 74; Nagayama, 'Wa no shoku' zenshi, 279–80.

<sup>2</sup> Cwiertka, *Modern Japanese Cuisine*, 24; Ishige, *Nihon no shokubunkashi*, 175; Tatsukawa, *Yamai to kenkō no aida*, 145.

<sup>3</sup> Cwiertka, *Modern Japanese Cuisine*, 33.

<sup>4</sup> Noma, 'Kindai Nihon niokeru nikushoku juyō katei no bunseki', 85.

<sup>5</sup> Majima, 'Eating Meat, Seeking Modernity', 100; Describing medicinal eating as an excuse or a nominal reason can be found in scholarship about meat or beef consumption from the Edo period to the Meiji period; see Harada, *Rekisho no naka no kome to niku*, 290–91; Noma, 'Kindai Nihon niokeru nikushoku juyō katei no bunseki', 85; Ishige, *Nihon no shokubunkashi*, 181; Rath, *Food and Fantasy in Early Modern Japan*, 102.

<sup>6</sup> Higashiyotsuyanagi, 'Ton katsu to sukiyaki', 210-216.

<sup>7</sup> For example, see Seijō Daigaku, *Nihon no shokubunka*, 48.

<sup>8</sup> Higashiyotsuyanagi, 'Ton katsu to sukiyaki', 208; Ishige, *Nihon no shokubunkashi*, 186; Nakanishi and Futaya, *Kindai Nihon no shōhi to seikatsu sekai*, 154–55. An article in 1907 about the change in perspective on beef testifies that no one feels dubious (when they see) beef on the dining table day or night. "Inshokubutsu nitaishuru shisō no henshen." *Asahi shinbun*, December 17, 1907, morning edition, p.5.

<sup>9</sup> Tatsukawa, *Meiji iji ōrai*, 29, 31-33.

<sup>10</sup> For example, an advertisement from the early Meiji period shows that beef would be consumed by those going on sea voyages. See: *Yomiuri shinbun*, May 9, 1878, morning edition, p.4.

<sup>11</sup> Fukuzawa, "'On Meat Eating' (1870)."

<sup>12</sup> There is no year written in the advertisement, and the article sharing this advertisement only mentioned that it was from around the first year. However, since the price was written in the old currency, we can assume that it was written before 1871. See: Uchida, 'Meiji shonen goro no gyūniku uridashi hirō bun.'

<sup>13</sup> I was unable to confirm the location mentioned by Kanagaki. It was written in Katakana as "Herukerei no chi." It may possibly be a reference to Herefordshire. Hereford cattle were exported worldwide, beginning in the 1810s.

<sup>14</sup> For the example of yōjoka, see "Ko Morita Kanya zatsuwa (sono8)." *Asahi shinbun*, September 1, 1897, morning edition, p.5.

<sup>15</sup> See Fig. 2.

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- <sup>16</sup> *Asahi shinbun*. March 17, 1881, morning edition, p.3.
- <sup>17</sup> “Kokushu, himegimi ni kakuniku o susumu.” *Yomiuri shinbun*, February 23, 1894, morning edition, p.3.
- <sup>18</sup> See the bar chart in Fig. 7.
- <sup>19</sup> See Fig. 6.
- <sup>20</sup> Yamamoto, *Nihon korera shi*, 26. There was a suspected cholera outbreak in 1862 after the outbreak of measles, but it is not confirmed. However, we also see scholarship referring to a cholera outbreak in 1862. See Gramlich-Oka, ‘The Body Economic,’ 33. Apparently, Japan took precautions regarding the cholera outbreak on the mainland as well. For example, “The regimen for cholera” (*Korera yōjōhō*) was notified by the magistrate’s office in Nagasaki in 1862, clearly mentioning the outbreak in Shanghai. See also Yamamoto, *Nihon korera shi*, 671.
- <sup>21</sup> Yamamoto, *Nihon korera shi*, 672-3
- <sup>22</sup> “Naimushō eiseikyoku hōkoku dai go gō.” *Yomiuri shinbun*, September 1, 1877, morning edition, p.1;  
“Naimushō eiseikyoku hōkoku dai go gō.” *Yomiuri shinbun*, September 3, 1877, morning edition, p.1.
- <sup>23</sup> Yamamoto, *Nihon korera shi*, 671.
- <sup>24</sup> See Appendix I.
- <sup>25</sup> For the report about *tsujiuri*, see Noma ‘Kindai Nihon niokeru nikushoku juyō katei no bunseki’, 78, 81-2; Noma, ‘Indigenous and Introduced,’ 397. See also, “Kō dai san jū ichi gō” *Yomiuri shinbun*. May 16, 1876, morning edition, p.1; Yokoyama also discovered that *tsujiuri* were banned in 1876; for more details about licenses to sell beef, see Yokoyama, ‘Tojō o meguru hitobito,’ 62–63.
- <sup>26</sup> The dotted line indicates a time gap in the data.
- <sup>27</sup> Kuboi, *Zusetsu shokuniku shuryō no bunkashi*, 137-8; Narisawa and Narisawa, ‘Shokuniku sangyō no tenkai’, 291; Hashimoto, *Shokutaku no Nihon shi*, 214-215; Yokoyama, ‘Tojō o meguru hitobito,’ 54. One source claimed that it opened up to 20 branches, another mentioned that there were 16. The recent article by Mitsuda mentioned it had 22 outlets. See Mitsuda, ‘From Colonial Hoof to Metropolitan Table’, 3.
- <sup>28</sup> *Yomiuri shinbun*, November 1, 1882, morning edition, p.4.
- <sup>29</sup> *Yomiuri shinbun*, September 23, 1886, morning edition, p.4; *Yomiuri shinbun*, December 24, 1886, morning edition, p.4.
- <sup>30</sup> *Yomiuri shinbun*, January 28, 1887, morning edition, p.4.
- <sup>31</sup> *Yomiuri shinbun*, October 20, 1887, morning edition, p.4.

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- <sup>32</sup> *Yomiuri shinbun*, November 29, 1888, morning edition, p.4; *Yomiuri shinbun*, April 2, 1889, morning edition, p.4; *Yomiuri shinbun*, November 5, 1890, morning edition, p.4.
- <sup>33</sup> *Yomiuri shinbun*, September 18, 1891, morning edition, p.3; *Yomiuri shinbun*, November 30, 1891, morning edition, p.4.
- <sup>34</sup> *Asahi shinbun*, July 20, 1892, morning edition, p.6.
- <sup>35</sup> See Figs. 10 and 11.
- <sup>36</sup> See the red boxes in Figs. 10 and 11. Since no.19 and no.1 shared the same address, we counted them as one to form the line with circles in Fig. 7.
- <sup>37</sup> *Asahi shinbun*, October 15, 1903, morning edition, p.4. Since a book about Kimura shōhei published in 1908 kept this no.19 in the list of Iroha outlets, and the advertisement of the opening itself did not mention this branch had closed, we still count this outlet in the figure. See Matsunaga, *Kimura sōhei kun den*, 28.
- <sup>38</sup> “Iroha tsuini heiten.” *Yomiuri shinbun*, August 27, 1913, morning edition, p.3
- <sup>39</sup> “Kubikukuri hakken.” *Yomiuri shinbun*, June 17, 1887, morning edition, p.2; “Gyūnikuten no kaiso Nakagawa rō shujin no awarenaru jisatsu.” *Yomiuri shinbun*, May 10, 1902, morning edition, p.4; “Yonekyū no heiten.” *Asahi shinbun*, October 14, 1891, morning edition, p.3; “Yonekyū no shiten mo mata heiten.” *Asahi shinbun*, October 24, 1891, morning edition, p.3.
- <sup>40</sup> Yokoyama, ‘Tojō o meguru hitobito,’ 73.
- <sup>41</sup> Japan took precautions regarding the cholera outbreak on the mainland. For example, “Regimen for Cholera” (*Korera yōjōhō*) issued by the magistrate’s office in Nagasaki in 1862, clearly mentioning the outbreak in Shanghai. See also Yamamoto, *Nihon korera shi*, 671.
- <sup>42</sup> After 1880, there was no donation of beef in the search results, but we see articles about donations of other resources.
- <sup>43</sup> *Yomiuri shinbun*, January 24, 1876, morning edition, p.2; *Yomiuri shinbun*, February 2, 1876, morning edition, p.1; *Yomiuri shinbun*, January 27, 1877, morning edition, p.3; *Yomiuri shinbun*, January 29, 1877, morning edition, p.3; *Yomiuri shinbun*, February 12, 1877, morning edition, p.2; *Yomiuri shinbun*, February 21, 1877, morning edition, p.3; *Yomiuri shinbun*, April 25, 1877, morning edition, p.3; *Yomiuri shinbun*, April 30, 1877, morning edition, p.2; *Yomiuri shinbun*, October 8, 1877, morning edition, p.3; *Yomiuri shinbun*, February 20, 1879, morning edition, p.2; *Yomiuri shinbun*, December 28, 1880, morning edition, p.3.
- <sup>44</sup> *Asahi shinbun*, October 1, 1879, morning edition, p.1.
- <sup>45</sup> Ibid.

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<sup>46</sup> Yamamoto, *Nihon korera shi*, 518. It also mentioned there are many tuna that went rotten. This is more likely a speculation because the bacteria of cholera only become widely known after 1883. Before that the route of the infection was unknown, despite one discussion that appeared in Japan attributing the infection to uncleanness, the smell from the toilet, and putrid odors. See also Yamamoto, *Nihon korera shi*, 520. It was generally agreed in Europe at the time that cholera was caused by bad odors (“miasma”).

<sup>47</sup> “Shikyō.” *Yomiuri shinbun*, June 26, 1886, morning edition, p.2.

<sup>48</sup> “Ushi ni tori.” *Asahi shinbun*, September 5, 1890, morning edition, p.4.

<sup>49</sup> “Gyoniku to korera.” *Asahi shinbun*, October 4, 1912, morning edition, p.5.

<sup>50</sup> Ibid.; “Koeki to gyūniku.” *Asahi shinbun*, November 24, 1912, morning edition, p.4.

<sup>51</sup> According to Harada, mentions about meat business increased from the Bunka to Tenpō period (1804-1844). See: Harada, *Edo No Shokubunka*, 71; Gramlich-Oka, ‘The Body Economic,’ 33. The first cholera outbreak in Japan, in 1822, happened within this period.

<sup>52</sup> Kanagaki, *Ansei korori ryūkōki*, 29–30; 76-7; Gramlich-Oka, ‘The Body Economic,’ 60; Yamamoto, *Nihon korera shi*, 671. One official document also proves that the government expected there might be difficulties for the people living around the seacoast and relying on fish and seafood if there was a restriction. The document suggested that there should not be strict restrictions on fresh fish and seafood. See also: Yamamoto, *Nihon korera shi*, 673.

<sup>53</sup> Satō gives an account of Japan under the threat of cholera using descriptions collected from diaries. Two diaries recorded the rumor about foreigners releasing poison. See Satō, *Bakumatsu ishin no minshū sekai*, 23–6.

<sup>54</sup> Satō, *Bakumatsu ishin no minshū sekai*, 30.

<sup>55</sup> Shimizu mentions that written evidence of the beast market returned to popular publications in the 1730s, Shimizu, ‘Meat-Eating in the Kōjimachi District of Edo,’ 99.

<sup>56</sup> Yamamoto, *Nihon korera shi*, 675.

<sup>57</sup> Ibid, 690-2.

<sup>58</sup> Ibid, 667, 670-1, 678, 684, 692.

<sup>59</sup> Ibid, 678.

<sup>60</sup> Kiuchi, *Ijin kinjō: ichidai hatsume*, 65. The flyer itself does not have page numbers but it was between pp.64-5.

<sup>61</sup> Yamamoto, *Nihon korera shi*, 520. See also note 46.

<sup>62</sup> For example, see the advertisement for Peptone in *Yomiuri shinbun*, February 17, 1896, morning edition, p.6.

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- <sup>63</sup> “Aomori chihō no seigyū.” *Yomiuri shinbun*, November 8, 1894, morning edition, p.5; “Taihoku no bokuchiku.” *Asahi shinbun*, May 26, 1897, morning edition, p.2.
- <sup>64</sup> *Yomiuri shinbun*, November 22, 1874, morning edition, p.2.
- <sup>65</sup> Tsuji Rokuemon. *Yomiuri shinbun*, August 25, 1875, morning edition, p.2.
- <sup>66</sup> The original lists “beef” and “meat” separately.
- <sup>67</sup> “Korerabyō yobō kanai kokoroe tsuzuki.” *Asahi shinbun*, July 21, 1895, morning edition, p.2. This article mentions that the European living in the Yokohama settlement very rarely got cholera.
- <sup>68</sup> *Yomiuri shinbun*, July 31, 1883, morning edition, p.3.
- <sup>69</sup> Mokushi, ‘Kokuhon o baiyōseyo’.
- <sup>70</sup> “Ryō gyūniku.” *Yomiuri shinbun*, October 16, 1885, morning edition, p.3.
- <sup>71</sup> *Yomiuri shinbun*, March 10, 1889, morning edition, p.4.
- <sup>72</sup> Tatsukawa, *Meiji iji ōrai*, 36-8.
- <sup>73</sup> Tatsukawa, *Meiji iji ōrai*, 39. Another of Tatsukawa’s works asserts that the health of the Japanese people is a national interest, which blurs the boundary between having beef as medicine and having beef daily to boost the physique. See Tatsukawa, *Yamai to kenkō no aida*, 145. The author agrees that protecting people from lethal disease is also a way to avoid harming the national interest. However, when this choice - whether to consume beef or not - was handed over to individuals, not everyone wanted to be as healthy as the ideal the Meiji government promoted for the nation. For an anecdote about an individual who claimed that she did not want to be as healthy and smart as westerners, see Higashiyotsuyanagi, “Ton katsu to sukiyaki”, 208-209. Since these two reasons both affected the consumption pattern of beef, here we separate staying healthy from strengthening the body for the national interest.
- <sup>74</sup> Because of limited space, I do not discuss cases where beef needed to be consumed on a daily basis for a much longer period as medicinal eating because of chronic disease; for example, among patients with tuberculosis.
- <sup>75</sup> “Ushiya no zōka.” *Yomiuri shinbun*, October 3, 1885, morning edition, p.2. For other articles reporting the seasonal nature of the beef business, see: “Robō no gyūnikuten.” *Asahi shinbun*, October 8, 1886, morning edition, p.1; “Saiban no shichū.” *Asahi shinbun*. December 29, 1900, morning edition, p.5; “Natsu to shokugyō no henka.” *Yomiuri shinbun*, August 3, 1911, morning edition, p.3; “Keishichō wa kaku torishimari ore ri.” *Yomiuri shinbun*, July 8, 1914, morning edition, p.7.



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<sup>76</sup> “Shichū shōka no keikyō.” *Asahi shinbun*, December 28, 1885, morning edition, p.3; “Chūgen to yabui.”

*Asahi shinbun*, July 16, 1898, morning edition, p.5.

<sup>77</sup> Nakanishi and Futaya, *Kindai Nihon no shōhi to seikatsu sekai*, 154–55.

<sup>78</sup> McNeill, *Plagues and Peoples*; Milward, *Understanding the West*, 1.

<sup>79</sup> Tatsukawa mentions that the Japanese judged the quality of food by the nutritional content. See Tatsukawa, *Meiji jī ōrai*, 38. As we have seen, digestibility is also key when it comes to this judgement.

## Bibliography

Cwiertka, Katarzyna. *Modern Japanese Cuisine: Food, Power and National Identity*.

London: Reaktion Books, 2006.

Fukuzawa, Yukichi. “On Meat Eating’ (1870).” Translated by Michael Bourdaghs. Accessed

September 14, 2023. <https://www.bourdaghs.com/fukuzawa.htm>.

Gramlich-Oka, Bettina. “The Body Economic: Japan’s Cholera Epidemic of 1858 in Popular

Discourse.” *East Asian Science, Technology, and Medicine*, no. 30 (2009), pp.32–73.

Harada, Nobuo. *Rekishi no naka no kome to niku: shokumotsu to tennō sabetsu [Rice and*

*Meat in History: Food, Emperors, and Discrimination]*. Tokyo: Heibonsha, 2005.

—, ed. *Edo no shokubunka: Washoku no hatten to sono haikai [Food Culture in Edo: The*

*Development of Japanese Food and Its Background]*. Tokyo: Shōgakukan, 2014.

Hashimoto, Naoki. *Shokutaku no Nihon shi: washoku bunka no dentō to kakushin [A*

*Japanese History of the Dining Table: Tradition and Innovation in Japanese Food*

*Culture]*. Tokyo: Bensei Shuppan, 2015.

Hatanaka, Mioko. *Fasshon fūdo, arimasu: hayari no tabemono kuronikuru, 1970-2010 [A*

*Chronicle of “Fashion Food”, 1970-2010]*. Tokyo: Kinokuniya Shoten, 2013.

—. *Karisuma fu-do: niku chichi kome to nihonjin [Charismatic Food: Meat, Milk, Rice and*

*the Japanese]*. Tokyo: Shunjūsha, 2017.

Higashiyotsuyanagi, Shoko. “Ton katsu to sukiyaki: bunmeikaikago no nikushoku [Tonkatsu

and Suki-yaki: Post-civilization Meat-eating].” In *Nihon no shokubunka 4 sakana to*

*niku [Japanese Food Culture 4: Fish and Meat]*, edited by Fujii Hiroaki, pp.204–33.

Tokyo: Yoshikawa Kōbunkan, 2019.

Ishige, Naomichi. *Nihon no shokubunkashi: kyūseki jidai kara gendai made [A History of*

*Food Culture in Japan: From the Paleolithic Period to the Modern Era]*. Tokyo:

Iwanami Shoten, 2015.

- Kanagaki, Robun. *Ansei korori ryūkōki: bakumatsu Edo no kansenshō to ryūgen* [*Cholera in Ansei: Infectious Diseases and Rumors in Edo in Bakumatsu Period*]. Foreword by Shinohara Susumu. Modern Translation by Kadowaki Dai. Commentary by Imai Hidekazu and Sakaki Satoshi. Notes by Suhō Ippei and Hirosaka Tomonobu. [n/d]. Facsimile, Tokyo: Hakutakusha, 2021.
- Kiuchi Morihiro. *Ijin kinjō: ichidai hatsumeï* [*The Golden Cane for People: One of The Greatest Inventions*]. Yokohama: Kiuchi Morihiro, 1891.
- Kuboi, Norio. *Zusetsu shokuniku shuryō no bunkashi: sesshō kindan kara inochi o ikasu bunka e* [*Illustrated Cultural History of Meat and Hunting: From Prohibition of Killing to Culture of Preserving Life*]. Tokyo: Tsuge shobō shinsha, 2007.
- Majima, Ayu. “Eating Meat, Seeking Modernity: Food and Imperialism in Late Nineteenth and Early Twentieth Century Japan.” *ICU Comparative Culture* 34 (2002), pp.95–121.
- Matsunaga, Toshitarō. *Kimura sōhei kun den* [*Biography of Kimura Sohei*]. Kinransha, 1908.
- McNeill, William Hardy. *Plagues and Peoples*. 1976. Reprint, New York: Anchor Books, 1998.
- Milward, Peter. *Understanding the West: Through English Eyes*. Tokyo: Nan’un-do, 1984.
- Mitsuda, Tatsuya. “From Colonial Hoof to Metropolitan Table: The Imperial Biopolitics of Beef Provisioning in Colonial Korea.” *Global Food History* (2023), pp.1–20.
- Mokushi, Itsuki. “Kokuhon o baiyōseyo (7). [To cultivate the foundation of the nation (7)].” *Asahi shinbun*, October 10, 1885, morning edition, p.3.
- Nagayama, Hisao (Supervisor). *The Cultural History of Japanese Food: World Famous for Promoting Good Health & Longevity*. Tokyo: Yasashii shokutaku, 2010.
- . “*Wa no shoku*” *zenshi: jōmon kara gendai made: chōjukoku, Nihon no megumi* [*The Complete History of Japanese Food: From the Jomon Era to the Modern Era, the Blessings of Japan, a Country of Longevity*]. Tokyo: Kawade Shobō Shinsha, 2017.

- Nakanishi, Satoru, and Futaya, Tomoko. *Kindai Nihon no shōhi to seikatsu sekai [The World of Consumption and Life in Modern Japan]*. Tokyo: Yoshikawa Kōbunkan, 2018.
- Narisawa, Hideo and Narisawa, Eijyu. “Shokuniku sangyō no tenkai [Development of the Meat Industry].” In *Sengo buraku no genjō gyōsei no kenkyū [Research on the Current Situation and Administration of Post-War Buraku]*, edited by Buraku mondai kenkyūjo, 289–326. Kyoto: Buraku mondai kenkyūjo, 1980.
- Noma, Mariko. “Kindai Nihon niokeru nikushoku juyō katei no bunseki: tsujiuri, gyūnabe to seiyō ryōri [An Analysis of the Process of Acceptance of Meat Eating in Modern Japan: Tsujiuri, Gyunabe and Western Cuisine].” *The Journal of Agricultural History* 40 (2006), pp.77–88.
- . “Indigenous and Introduced: How Beef-Eating Acceptance Affected the Cattle Industry in Modern Japan.” *The Korean Journal of History of Science* 44, no. 2 (2022), pp.393–413.
- Rath, Eric C. *Food and Fantasy in Early Modern Japan*. Berkeley: University of California Press, 2010.
- Satō, Shigerō. *Bakumatsu ishin no minshū sekai [The Public World in the Bakumatsu Period and Meiji Restoration]*. Tokyo: Iwanami Shoten, 1994.
- Seijō Daigaku Minzokugaku Kenkyusho, ed. *Nihon no shokubunka: Shōwa shoki, zenkoku shokuji shūzoku no kiroku [Japanese Food Culture: Early Showa Period, Record of National Dietary Customs]*. Tokyo: Iwasaki Bijutsusha, 1990.
- Shimizu, Akira. “Meat-Eating in the Kōjimachi District of Edo.” In *Japanese Foodways, Past and Present*, edited by Eric C. Rath and Stephanie Assmann. Urbana: University of Illinois Press, 2010.
- Tatsukawa, Shōji. *Meiji iji ōrai [On Public Health in the Meiji Period]*. Tokyo: Shinchōsha 1986. Facsimile, Tokyo: Kōdansha, 2013.

—. *Yamai to kenkō no aida* [*Between Illness and Health*]. Shinchō Sensho. Tokyo: Shinchōsha, 1991.

Uchida Shigefumu. “Meiji shonen goro no gyūniku uridashi hirō bun [Beef sales announcement from around the beginning of the Meiji era].” *Yomiuri shinbun*, May 28, 1898, morning edition, p.1.

Yamamoto, Shunichi. *Nihon korera shi* [*History of Cholera in Japan*]. Tokyo: Tōkyōdaigaku shuppankai, 1982.

Yokoyama, Yuriko. “Tojō o meguru hitobito [People Around the Slaughterhouses].” In *Toshi no shūen ni ikiru* [*Living on the Urban Periphery*], edited by Takashi Tsukada, 53–85. Tokyo: Yoshikawa Kōbunkan, 2006.

Appendix I (Fig.1 – 4)

Fig. 1 Advertisements for and articles about shops or outlets of beef and beef products with copy related to medicinal benefits from 1874 to 1879

Date	Product / dish	Key phrases / sentence related to health concern
18760915(YS4)	beef paste, chicken paste	nourishment
18761110(YM3)	life nourishing beef-shu	Life nourishing
18780509(YM4)	beef paste, chicken paste	nourishment; nourishes the spleen and stomach and increases energy; when the old and weak have it frequently, it must strengthen them and make them healthy; the greatest medicine for longevity
18780611(YM4)	beef paste, chicken paste	nourishment
18780707(YM4)		
18781211(YM2)	beef and soup (hawker)	for medicinal purpose
18790118(YM4)	beef paste, chicken paste	nourishment
18790219(YM4)		
18790313(YS4)		
18790330(YM4)	<i>oboro ushi</i>	nourishment
18790411((YM4)	<i>beef oboro</i>	replenish mind and soul when one is weak; help energize the old and weak; Improve internal conditions for postpartum weakness; energize one's weakness after sex; energize children when they are weak; nourishment
18790423(YM4)	beef paste, chicken paste	nourishment
18790510(YM4)	<i>oboro Ushi</i>	nourishment; even edible for those with weak teeth
18790530(YM4)	beef paste, chicken paste	nourishment
18790909(YM4)		
18791118(YM4)		
18791228(YM4)		

Source: *Yomiuri shinbun* 1874-1912, *Asahi shinbun* 1879 -1912

Y: *Yomiuri shinbun*; M: morning edition; S: Separate print; Number: page number

Fig. 2 Advertisements for and articles about shops or outlets of beef and beef products with copy related to medicinal benefits from 1880 to 1889

Date	Product / dish	Key phrases / sentence related to health concern
18801117(YM4)	beef picked in sake lees	the effect of it as nourishment is indisputable
18801121(YS1)		
18801218(YS4)		
18810127(YM4)	beef curry	elixir of nourishment ( <i>yōjō jinzai</i> ); nourish one's spirit and increase one's energy; effective for neurosis and various sicknesses
18810407(YM2)	beef soup	the nourishment of body
18810727(YM4)	beef bitter wine	medicine of strength; effective for those who are weak or after sickness
18810902(YM4)		
18820822(AM4)	beef <i>tsukuda-ni</i>	nourishment
18820908(AM4)	beef essence	excellent nourishment; for those who are weak and sick; strengthen the body quickly
18820922(YM4)	beef <i>azuma-ni</i> can	convenient nourishing food
18821015(AM4)	beef essence, beef <i>tsukuda-ni</i>	nourishment
18821019(YM4)	canned beef <i>azuma-ni</i>	convenient nourishing food
18821101(YM4)	<i>gyunabe</i> , ovine-nabe	nourishing eating; health reservation/recuperation
18821109(AM4)	beef essence, beef candy, beef <i>mizuame</i> , <i>tsukuda-ni</i>	nourishing beef products
18830410(AM4)	beef essence	nourishment; the best products to strength from various weakness
18830422(AM4)		
18840928(YM4)	beef soup	numerous orders from doctors and various hospitals
18850926(YM4)	beef soup	numerous orders from various doctors and hospitals
18850929(YM4)		
18851027(AM4)	beef soup	excellent nourishing food; generally speaking, beef is the most nourishing among flora and fauna
18851031(YM4)	beef soup	numerous orders from various doctors and hospitals
18860104(YM4)		
18860130(YM4)		
18860331(YM4)		
18860430(YM4)		
18860529(YM4)		
18860630(YM4)		
18860728(YM4)	medicinal beef soup	medicinal; good nourishment
18860729(YM4)	beef soup	numerous orders from various doctors and hospitals
18860813(AM4)	<i>kina</i> beef iron wine	nourishment; strength
18860819(YM4)	medicinal beef soup	medicinal
18860827(YM4)		
18860831(YM4)	beef soup	numerous orders from various doctors and hospitals
18860915(AM4)	<i>kina</i> beef iron wine	medicinal wine for strengthening one
18860928(YM4)	medicinal beef soup	nourishment; specific nourishment; numerous orders from great doctors
18860930(YM4)		
18861013(YM4)	<i>gyunabe</i>	best nourishment
18861029(YM4)	beef soup	numerous orders from various doctors and hospitals
18861030(YM4)		
18861103(YM4)	<i>gyunabe</i>	serving the real nourishing food and beverage at a reasonable prize
18861203(AM4)	beef can	suitable for the old and weak; gift for sick persons; nourishing
18861218(AM4)		

Date	Product / dish	Key phrases / sentence related to health concern
18861224(YM4)	<i>gyunabe</i>	aims at increasing the meat consumption that nourishes human bodies the best
18870107(AM4)	beef can	suitable for the old and weak; gift for sick persons; nourishing
18870201(YM4)	beef soup	numerous orders from various doctors
18870203(YM4)		
18870315(YM4)	beef soup	numerous orders from various hospitals and doctors
18870324(AM4)	beef can	suitable for the old and weak; gift for sick persons; nourishing
18870430(YM4)	beef soup	numerous orders from various doctors and hospitals
18870501(YM4)		
18870621(AM3)	beef <i>oboro-ni</i>	best nourishing food; gift for sick persons
18870630(YM4)	beef soup	numerous orders from various doctors and hospitals
18870809(YM4)		
18870810(YM4)		
18871103(AS2)	beef <i>oboro-ni</i>	full of nourishment; gift for sick persons
18871130(YM4)	beef soup	numerous orders from various doctors and hospitals
18880110(YM3)	fowls and beef restaurant	nourishment
18880302(YM4)	beef <i>tsukuda-ni</i> , boiled beef	the production process ... does not reduce the content of nourishment
18880304(YS2)		
18880313(YM4)		
18880503(YM4)	beef chicken soup	numerous of orders from various doctors and hospitals
18880529(AM3)	<i>kina</i> beef iron wine	aims for strengthening body; nourishing beverage
18880731(YM4)	beef soup	numerous orders from various doctors and hospitals
18880930(YM4)	beef soup	numerous orders from various great doctors
18881030(AM4)		
18881031(YM4)		
18881128(YM4)		
18881227(YM4)		
18890106(YM3)		
18890108(YS2)	<i>gyunabe</i> , easy western dishes	nourishing
18890110(YM4)		
18890327(AM4)	beef <i>tsukuda-ni</i>	nourishment
18890328(AM3)		
18890329(AM3)		
18890402(AM3)		
18890628(YM4)	beef soup	numerous orders from various great doctors

Source: *Yomiuri shinbun* 1874-1912, *Asahi shinbun* 1879 -1912

A: *Asahi shinbun*; Y: *Yomiuri shinbun*; M: morning edition; S: Separate print; SS: Supplement Section;  
Number: page number



Fig. 3 Advertisements for and articles about shops or outlets of beef and beef products with copy related to medicinal benefits from 1890 to 1899

Date	Product / dish	Key phrases / sentence in relation to health concern
18901105(AM4)	beef soup	medicinal; nourishment; with comments from doctors
18901106(AM4)	beef soup	nourishment
18920426(AM3)	beef <i>yamato-ni</i>	nourishing
18931003(YM3)	beef and chicken miso	king of nourishment
18940830(AM3)	beef miso	nourishing...food
18941030(AM6)	beef miso	increase one's physical strength, energize one and eventually one ought to obtain the happiness longevity without sickness; nourishment
18950217(YM6;AM6)	triumphal soup, triumphal beef soup	nourishment
18950331(AM6)	beef miso	especially now there is sign of severe plague outbreak; for the sick and the old, young, postpartum and wounded; nourish body and mind
18950418(YM6)	beef miso	good nourishment; especially now there is sign of severe plague outbreak; effective for various conditions, such as lung conditions, stomach conditions, beriberi, womb conditons, infertility, after being wounded; anemia
18950430(AM3)	beef (dishes is not specified)	nourishment
18960217(YM6)	Peptone (made from beef)	nourishment; effective for gastrointestinal conditions, lung conditions, anemia, and general weakness
18960327(YM5)		
18960822(AM4)	Golden bread (filled with beef miso)	rich in nourishment

Source: *Yomiuri shinbun* 1874-1912, *Asahi shinbun* 1879 -1912

A: *Asahi shinbun*; Y: *Yomiuri shinbun*; M: morning edition; Number: page number

Fig. 4 Advertisements for and articles about shops or outlets of beef and beef products with copy related to medicinal benefits from 1900 to 1912

Date	Product / dish	Key phrases / sentence in relation to health concern
19000516(AM8)	extract of meat (made from beef)	nourishment of beef; rich in nourishment; suitable for young, old, and weak
19000518(AM8)		
19000521(AM8)		
19000625(YM8)		
19010410(YM5)	Bovine (made from beef)	nourishment that becomes your blood just by drinking it; odorless and tasteless, has been praised as one of the best sources of nourishment; therefore it is easy to drink for those who are medicine-avoider and children
19010410(YM15)	Somatose (beef powder)	rich in nourishment; for those who are generally weak or in the period recovering from illness
19020826(AM8)	beef <i>yamato-ni</i> can	nourishing
19020828(AM8)		
19020910(AM7)		
19030818(AM4)	beef jelly	nourishment of beef
19031109(YM4)	beef jelly	rich in nourishment, suitable for the weak and the sick
19040103(YM5)		
19040108(YM5)		
19050627(AM1)	beef <i>yamato-ni</i>	nourishing food for summer
19090926(AM1)	beef can	rich in nourishment
19091026(AM1)		
19091215(AM1)		
19110710(AM7)	Musculosine (made from beef)	tonic replenishing blood that necessary for those have anemia; especially suitable for men, women and children who are oversensitive
19110908(AM1)		
19111105(AM7)	Musculosine (made from beef)	tonic replenishing blood; especially suitable for men, women and children who are oversensitive, effective for weakness and anemia
19121227(YM4)	beef pickled with miso	rich in nourishment

Source: *Yomiuri shinbun* 1874-1912, *Asahi shinbun* 1879 -1912

A: *Asahi shinbun*; Y: *Yomiuri shinbun*; M: morning edition; Number: page number

**薬用ろつぷ奔賣 價定**

人間は病なからん病んで身休の衰する是れ自然に免れざるの數なり今や醫術日に月に進み良薬亦益々備はるを觀ても凡そ藥劑の効ハ正に病者を選ばざるにありのみ病人の衰弱を得んはハ則ち滋養分の注入なるべからず近年世間往々をツツと買物くものあれども其品質極めて悪しく或ハ骨を以て製し或ハ脂肪を以て製し且つ其製造の不完全にして昔に製用に適するものなし故廣澤洋行は西洋料理を學びて其真義を極め製法にツツの製造ハ新が特色の故に稱へり偶起よ所ありて或る名醫に就き藥用をツツ製法の學理を問ひ答へ實驗を経て遂に完全純真なるものを製造し大方病者國の稱賛を得たり今や諸國に流るる本會に其遺業を繼ぎ之を藥用をツツと名づけ専ら誠實を主とし廣く世間に販賣し吾が同胞の衛生ハ上野か補益する所あらんと欲す

**藥用ろつぷ** 上等食用牛肉を以て製するものなれど無色透明にして其質極めて純良なり且つ多量の滋養分を含むことハ少く蒸冷に送へば粉状なり

**藥用ろつぷ** 之を飲用すること凡そ四五週日に及ハ、忽ち筋肉肥とり元氣伸張し

**藥用ろつぷ** 味は極めて美にしてよく病人の口味に適し其食欲を促すと粉状なり

**藥用ろつぷ** 腸健を助すと頭昏なり

**藥用ろつぷ** 腸健の製法に從ふものにして製造器械ハ悉數計を任組み四時間

**藥用ろつぷ** 温度を以て表す十分ハ肉の滋養分を抽出したるものなり

**藥用ろつぷ** 常に病人の藥用に適するのみならず平常健康なる者又身休の虛弱なる者之を常用するときは其健康を保ち諸種の病者に授けらるるの効あり

**藥用ろつぷ** 衛生局試驗所に定量分析を依頼中なれど御試驗の成績ハ退て更に廣告する所あるべし

**藥用ろつぷ** 飲用の節少許の食鹽と糖類又ハ野菜などを添へたるものを差加へられ

**藥用ろつぷ** 食鹽の一英味を添へし

**長谷川泰先生御品評** 拜啓過日御投書下候をツツと拜味致候儀頗る真品にて坊間未見其比藥用上等奇の者と認定

**隈川宗悦先生御品評** 拜啓陳ハ貴會製造の雞肉をツツと並に牛肉をツツと御送付被下候儀可致候御中越に付即

一應試驗致候儀充分の滋養分を含有し且味ハ美にして如何なる患者も飲得可申候御中越に付即

人の患者に勧告し用ひさせ候儀皆好みて相用ひ殊に胃加答兒の患者にして嘔吐甚しく何品

も飲食すると能はざりし者且腸胃弱にて嘔吐最甚しく藥劑ハ勿論水一口だも納らざる者何品

も飲用致候儀何れも飲得之が爲り速に應立此程全快致候之れ信に原料の立さと製法の完全な

るに據るものと認定致候間世人の爲め益々御馳謝あらんとを希望す先ハ實驗の成績御報告

まで如此に御座候也

**松山棟庵先生御品評** 廣澤洋行にて予に服せし藥用をツツと製法の學理を

りて鑑定を乞へり其品質の純良なる因より坊間諸君も之に比らざる雨來多數の患者に勧

めて之を飲用せしめ果して効力の顯著なるを認めたり

**安藤正胤先生御品評** 萬年會主人自製の藥用をツツとを携へ來り余に

せし見して其滋養の効驗著しきを見たり爰に於て其製法の確かなるを信す

本會今回諸先生の教を乞へ一層の改良を加へ充分常用者に對するの信用を取んじ發賣致候

に於てハ東京府下十五區内ハ毎日配達爲政深謝御信用の方々の御便はがきを以て陸續御注

文あらんとを希望仕候也

但し御望に應じ如何なる上等の品にても御製仕候

直橋區銀座三丁目十一番地

五十一月 開業 萬年會

Fig. 5 An advertisement for beef soup and chicken soup on November 5, 1890, with comments from doctors printed in the *Asahi shinbun* (morning edition, p.4).

衛生局報告	
○全國傳染病患者一週間(二月廿三日ヨリ同月廿九日)至ル(中報第四回)	
鵝室扶斯新患者七十八人	新患者死亡廿四人
赤痢全	瘧 人全
實布の里亞全	十五人全
鵝室扶斯全	三人全
痘疹全	三十九人全
瘧全	三人全
痘疹全	二人全
明治十四年一月卅一日 内務省衛生局	

Fig. 6 A report from the Sanitary Bureau on February 6, 1881, printed in the *Yomiuri shinbun* (morning edition, p.1) showing the cases of different infections and the number of deaths.

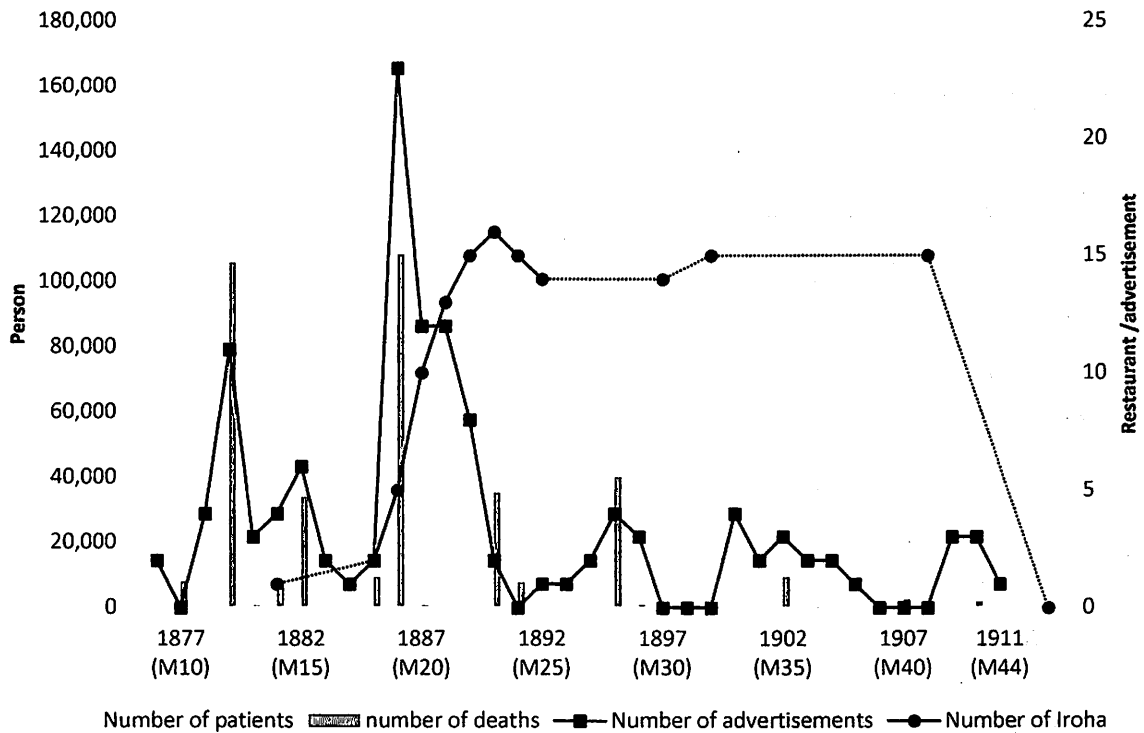


Fig. 7 The relationship between cholera and the beef business

Source: The data of patients and deaths from cholera was downloaded from the homepage of the Ministry of Health, Labour and Welfare. Website:

<https://www.mhlw.go.jp/wp/hakusyo/kousei/14/backdata/1-1-1-01.html>.

The data of number of advertisements is based on Appendix I. The data for the number of Iroha branches was collected from Iroha advertisements in the Meiji period. See also Matsunaga, *Kimura sōhei kun den*, 26–29.

	whole year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Nov	Dec
1875										500 <sup>a</sup>		
1878	7942 <sup>b</sup>											
1879				734 <sup>c</sup>	594 <sup>d</sup>	484 <sup>e</sup>						
1881	5091 <sup>f</sup>	516 <sup>g</sup>	433 <sup>h</sup>			341 <sup>i</sup>	300 <sup>j</sup>	321 <sup>k</sup>	250 <sup>l</sup>	571 <sup>m</sup>	499 <sup>n</sup>	
1882		394 <sup>o</sup>	420 <sup>p</sup>	419 <sup>q</sup>	313 <sup>r</sup>	301 <sup>s</sup>	1010 <sup>t</sup>					
1883	9855 <sup>u</sup>	1203 <sup>v</sup>										
1884		153 <sup>w</sup>	307 <sup>x</sup>	352 <sup>y</sup>	647 <sup>z</sup>			141 <sup>aa</sup>	298 <sup>bb</sup>	353 <sup>cc</sup>		
1885		391 <sup>dd</sup>	543 <sup>ee</sup>	514 <sup>ff</sup>	481 <sup>gg</sup>	399 <sup>hh</sup>	307 <sup>ii</sup>					
1886	20296 <sup>jj</sup>											2676 <sup>kk</sup>
1887	19232 <sup>ll</sup>						1180/ 1225 mm				1757 <sup>nn</sup>	2010 <sup>oo</sup>
1888	19205 <sup>pp</sup>	1532 <sup>qq</sup>							972 <sup>rr</sup>		1702 <sup>ss</sup>	1827 <sup>tt</sup>
1889					1292 <sup>uu</sup>	1121 <sup>vv</sup>		1032 ww				
1890		1126 <sup>xx</sup>										

Fig. 8 The number of cattle being slaughtered in Tokyo from 1879 to 1889

Source: Articles from *Yomiuri shinbun* and *Asahi shinbun* 1879-1890. (Only the data in the articles that matched the keywords searched is included.) See also Noma, 'Kindai Nihon niokeru nikushoku juyō katei no bunseki', 79.

<sup>a</sup> Noma, 'Kindai Nihon niokeru nikushoku juyō katei no bunseki', 79.

<sup>b</sup> *Yomiuri shinbun*, March 22, 1879, morning edition, p.1.

<sup>c</sup> *Yomiuri shinbun*, June 15, 1879, morning edition, p.2.

<sup>d</sup> Ibid.

<sup>e</sup> Ibid.

<sup>f</sup> *Yomiuri shinbun*, February 16, 1882, morning edition, p.1.

<sup>g</sup> *Yomiuri shinbun*, February 6, 1881, morning edition, p.1.

<sup>h</sup> *Yomiuri shinbun*, April 7, 1881, morning edition, p.1.

<sup>i</sup> *Yomiuri shinbun*, June 26, 1881, morning edition, p.2.

<sup>j</sup> *Yomiuri shinbun*, July 6, 1881, morning edition, p.1.

<sup>k</sup> *Yomiuri shinbun*, August 10, 1881, morning edition, p.2.

<sup>l</sup> *Yomiuri shinbun*, September 6, 1881, morning edition, p.1.

<sup>m</sup> *Yomiuri shinbun*, October 9, 1881, morning edition, p.3.

<sup>n</sup> *Yomiuri shinbun*, December 8, 1881, morning edition, p.2.

<sup>o</sup> *Yomiuri shinbun*, February 28, 1882, morning edition, p.3.

<sup>p</sup> *Yomiuri shinbun*, March 10, 1882, morning edition, p.2.

<sup>q</sup> *Yomiuri shinbun*, April 5, 1882, morning edition, p.1.

<sup>r</sup> *Yomiuri shinbun*, May 7, 1882, morning edition, p.2.

<sup>s</sup> *Yomiuri shinbun*, June 21, 1882, morning edition, p.3.

<sup>t</sup> *Yomiuri shinbun*, July 7, 1882, morning edition, p.3.

<sup>u</sup> "Tojū no kazu." *Yomiuri shinbun*, March 4, 1884, morning edition, p.2.

<sup>v</sup> The total number of cattle being slaughtered from January to March. *Yomiuri shinbun*, April 28, 1883, morning edition, p.3.

<sup>w</sup> "Tojū." *Yomiuri shinbun*, April 12, 1884, morning edition, p.2.

<sup>x</sup> Ibid.

<sup>y</sup> Ibid.

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- <sup>z</sup> The total number of the cattle being slaughtered from April to June. "Tochiku." *Yomiuri shinbun*, July 4, 1884, morning edition, p.2.
- <sup>aa</sup> "Tojū." *Yomiuri shinbun*, October 2, 1884, morning edition, p.2.
- <sup>bb</sup> Ibid.
- <sup>cc</sup> Ibid.
- <sup>dd</sup> "Tojū." *Yomiuri shinbun*, April 4, 1885, morning edition, p.2.
- <sup>ee</sup> Ibid.
- <sup>ff</sup> Ibid.
- <sup>gg</sup> "Tochiku no kazu." *Yomiuri shinbun*, July 16, 1885, morning edition, p.3.
- <sup>hh</sup> Ibid.
- <sup>ii</sup> Ibid.
- <sup>jj</sup> The subtotal does not match with the broken down figures. Another sum we got after calculation using the sub total given is 20337. "Sakunenichū no tojūsū." *Yomiuri shinbun*, March 11, 1887, morning edition, p.2.
- <sup>kk</sup> "Tojū no kazu." *Yomiuri shinbun*, January 15, 1887, morning edition, p.2.
- <sup>ll</sup> "Tojū." *Yomiuri shinbun*, February 5, 1888, morning edition, p.2.
- <sup>mm</sup> "Tojū." *Yomiuri shinbun*, July 15, 1887, morning edition, p.1; "Gyūnyū jūniku hanbai narabini chikurui tosatsu." *Yomiuri shinbun*, July 28, 1887, morning edition, p.1.
- <sup>nn</sup> "Tojū no tōsū." *Yomiuri shinbun*, December 13, 1887, morning edition, p.3.
- <sup>oo</sup> "Tojū no kazu." *Yomiuri shinbun*, January 18, 1888, morning edition, p.2.
- <sup>pp</sup> The total number of cattle being slaughtered at Shirokane and Senzoku. "Tojū no kazu." *Asahi shinbun*, March 27, 1889, morning edition, p.4.
- <sup>qq</sup> The total number of cattle being slaughtered in Shirokane-mura and Senzoku-mura. "Tojū." *Yomiuri shinbun*, February 17, 1888, morning edition, p.3.
- <sup>rr</sup> The total number of cattle being slaughtered in Shirokane-mura and Senzoku-mura. "Jūnikuten oyobi tosatsu no kazu." *Asahi shinbun*, September 11, 1888, morning edition, p.3.
- <sup>ss</sup> The total number of cattle being slaughtered in Shirokane-mura and Senzoku-mura. "Tojū gōkei." *Yomiuri shinbun*, December 15, 1888, morning edition, p.3.
- <sup>tt</sup> "Tojū gōkei." *Yomiuri shinbun*, January 16, 1889, morning edition, p.2.
- <sup>uu</sup> The total number of cattle being slaughtered in Shirokane-mura and Senzoku-mura. "Togyū gōkei." *Yomiuri shinbun*, May 19, 1889, morning edition, p.3.
- <sup>vv</sup> "Tosatsu gōkei." *Yomiuri shinbun*, June 20, 1889, morning edition, p.1.
- <sup>ww</sup> "Tojū gōkei." *Yomiuri shinbun*, August 21, 1889, morning edition, p.3.
- <sup>xx</sup> "Togyū no kazu." *Yomiuri shinbun*, February 22, 1890, morning edition, p.2.

**開業移轉廢業賣家廣告**

今般都合に據り園草馬道第十四支店廢業し麻布六本  
 木へ移轉開業と神田區下白壁町第十一支店廢業し青  
 山南町へ移轉開業と芝區南佐久間町第四支店廢業し  
 半込神樂坂上四ツ辻石原喜三郎氏敷年開業に於て第  
 る煉化三階建菱△形見晴し絶景ある家屋に於て第  
 八支店と稱し當時造作中來る十二月中旬開業可仕に  
 付廢業三店へ御來駕の各位方へ不及申各支店御引立  
 に預り候御客様方開業の當日より陸續御來車且御用  
 被仰付度就ての淺草馬道神田下白壁町芝區南佐久間  
 町の三店の御買求り被下度一大徳用の家屋大安賣廣告  
 御方の三店の御買求り被下度一大徳用の家屋大安賣廣告

芝區  
 三田區  
 いろは  
 木村莊平

Fig. 9 Iroha's advertisement for opening, moving, closing and selling properties on November 30, 1891 (Yomiuri shinbun, morning edition, p.4).





**虎列刺病豫防法一覽表**

○牛肉	○牛奶	○羊奶	○乳類	○豆類	○穀類	○蔬菜	○水果	○糖類	○油類	○香料	○調味料	○衛生用品	○その他
○生肉	○生乳	○生乳	○大豆	○小麦	○米	○白菜	○蘋果	○砂糖	○食油	○胡椒	○塩	○手拭	○薬
●煮肉	●牛乳	●羊乳	●豆乳	●パン	●白米	●白菜	●蘋果	●砂糖	●食油	●胡椒	●塩	●手拭	●薬

飲食物の取扱い

牛肉・生乳は必ず十分な加熱を要す。肉類は必ず表面を焦らす。牛乳は必ず煮沸し、その上清を飲用す。羊乳は必ず煮沸す。豆類は必ず十分に煮し、その湯を飲用す。穀類は必ず十分に炊き、その湯を飲用す。蔬菜は必ず十分に洗ひ、生食するものは必ず加熱す。水果は必ず十分に洗ひ、生食するものは必ず加熱す。糖類は必ず十分に煮し、その湯を飲用す。油類は必ず十分に熱し、その湯を飲用す。香料は必ず十分に煮し、その湯を飲用す。調味料は必ず十分に煮し、その湯を飲用す。衛生用品は必ず十分に洗ひ、その湯を飲用す。その他は必ず十分に洗ひ、その湯を飲用す。

編輯 東京府平氏  
出版 人 某

虎列刺病は、急激なもので、二時間より四時間で消化す。  
 ●五時以上下痢腹痛の不消化物あり

Fig. 12 List of preventive methods for cholera. Beef is on the top row, the seventh from the right, and beef soup is on the second from the top, the fifteenth from the right. The author was a commoner in Tokyo. The editor and publisher were anonymous. Courtesy of the National Diet Library Digital Collections.

○牛羊豚三種の中に就き最も滋養質を帯ぶるもの牛肉であるとい世人も知る處あるが今西洋の或農學化學家の分析表を得たれば左に掲ぐ

水分 脂肪 鹽類	種別		
	牛 肉	羊 肉	豚 肉
六〇、八〇〇	五七、三〇〇	五五、三〇〇	
一一八、〇〇〇	一一四、五〇〇	一一四、〇〇〇	
五、二〇〇	四、四〇〇	二、八〇〇	

此表に據るときの肉即ち窒素質にして人の體內に入り肉を成すべき部分の牛最も多く羊之に次ぎ豚又之に次ぐ之に反し脂肪即ち炭素質にして人の體內に入り温素を成す部分の豚最も多し羊之に次ぎ牛又之に次ぐ故に食肉の實に牛肉に若くものきを信ず

Fig. 13 Article printed on July 12, 1884, in the *Asahi shinbun* (morning edition, p.3) proving that beef is the best meat with scientific evidence.