



THINK PIECE: Known Unknowns in Japanese Food History

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Abstract

As more scholars enter the field of Japanese food history, we are all becoming aware of how much more there is to learn. Our progress rests on the availability of primary sources which are plentiful for some topics but nonexistent for others, especially for premodern Japan (before 1868). This essay explores several “known unknowns,” instances when my own research on sake, recipes, and restaurants faced unanswered questions due to a lack of sources. I also touch briefly on meat eating in premodern Japan, which is another long-standing issue of debate in food history.

Keywords: Japanese food, sake, sushi, meat consumption, restaurants

Researching what ordinary people ate in the past is like trying to scratch an itchy foot through a shoe, according to cultural geographer Arizono Shōichirō who studied the diet of the peasants in early modern (1600-1868) Japan. Arizono’s exasperation stemmed from the fact that there are no primary records describing precisely what ordinary people ate on a daily basis in the early modern period.¹ But ordinary meals often escape notice even today.

¹ Arizono Shōichirō, *Kinsei shomin no nichijōshoku: Hyakushō wa kome o taberarenakatta ka?* (Ōtsu: Kaiseisha, 2007), 2, 4.

Americans are better able to recall what we ate for Thanksgiving last year than for breakfast last week. Food served for celebrations is memorable and it is recorded in diaries and other documents in contrast to what French philosopher Jean-François Revel (1924-2006) called the “silent cuisines,” the diet of the peasant and middle class that evolved slowly over time without drama.² Such cuisines are silent also for the fact that few people bother to write about them, often because the daily bread or grain porridge are too prosaic to mention. But even elite cuisine is silent in some instances. One could read all of *The Tale of Genji*, Murasaki Shikibu’s (c. 978- c. 1014) epic of love and tears set at the Heian-period (794-1185) court, and wonder what Genji and the aristocrats ate either at banquets or for their breakfast, as Takeshi Watanabe observed. Watanabe has tried to answer this question by working through other sources. He contends that aristocrats were interested in food, but they portrayed themselves as indifferent to it. Hence they purposefully omitted descriptions of foods and eating from their fictional versions of an ideal world.³ Silence about food for them was intentional, but it leaves the scholar scratching their heads, if not their feet.

This essay examines a few “known unknowns” in Japanese food history as a way of sketching where some of the boundaries of knowledge end and where supposition begins. In preparing this essay, I asked a dozen colleagues who work on food in Japan about where they encountered blackholes in their research or had questions that remain unanswered due to a lack of primary sources. Unfortunately, few responded to my query. (Perhaps we are all reluctant to admit what we do not know?) So, this became a personal essay focusing on areas of the unknown that I have encountered in my own work. My narrative examines three topics: sake, recipes, and restaurants, which come from my own research. I also introduce another longstanding question in Japanese food history regarding the prevalence of meat consumption in premodern Japan (before 1868) to show that sometimes trying to explain an absence presumes that absence.

Sake’s Secrets

Sake is often mistranslated as “rice wine,” and that is a misstatement for two reasons. First, although rice is the main ingredient for sake, the beverage is created in a process more similar to brewing beer than fermenting wine. Wines rely upon the natural sugars available in the fruit for the yeast to convert into alcohol; but in the case of sake, a mold called *kōji* 麹 is used to break down the starches in the grain into sugars and muster them for fermentation. Beer brewing does the same process by malting. So, sake is not created like a wine. Second, the typical alcohol by volume (ABV) for most wine varies between 12.5% and 14.5%, depending on the variety. Sake is 20% ABV, although brewers usually dilute the alcohol content down to 16% ABV, thereby creating more sake and improving the taste -- they say.

² Jean-François Revel, “Retrieving Tastes: Two Sources of Cuisine,” in *The Taste Culture Reader: Experiencing Food and Drink*, ed. Carolyn Korsmeyer (New York, Berg: 2005), 52.

³ Takeshi Watanabe, “Gifting Melons to the Shining Prince: Representations of Food in the Late Heian Period,” in *Devouring Japan: Global Perspectives on Japanese Culinary Identity*, ed. Nancy Stalker (New York: Oxford University Press, 2018) 48, 53.

In other words, sake is stronger than a typical wine. By law, table wines sold in the United States have to have an ABV of 14% or below.



Figure 1. Sake. Denshu Japanese Sake, Koichi Oda / CC BY-SA (<https://creativecommons.org/licenses/by-sa/2.0>). Available from: https://commons.wikimedia.org/wiki/File:Denshu_Japanese_Sake_-_Flickr_-_odako1.jpg (Accessed August 7, 2020).

Whatever the alcoholic beverage, current law requires printing the ABV on the bottle, but the strength of premodern sake remains a mystery. The ABV of sake is an important question if we want to judge the fortitude of drinkers in premodern Japan. Medieval samurai exchanged shallow cups of sake at banquets, referring to each cupful as a round (*kon* 献). The foods meant to accompany these rounds were listed as the “menu” (*kondate* 献立). *Record of Things Seen and Heard* (*Kanmon gyoki* 看聞御記), the diary of imperial prince Fushimi no Miya Sadafusa (1372–1456), records a banquet in 1422 when warlord Uesugi Tomokata served the shogun Ashikaga Yoshinori (1394–1441) twenty-seven rounds of drinks.⁴ When Shogun Yoshinori hosted Emperor GoKomatsu (1377–1433) he served seventy rounds of drinks.⁵ One can find even more astounding tales of drinking in the early modern period. Where the size of drinking cups is unspecified in medieval sources, a famous drinking contest in Edo (Tokyo) in 1649 featured six cups ranging in size from 30 ounces to 1.44 gallons. The winner of this contest supposedly polished off all of these cups, drinking the equivalent of 4.3 gallons of sake.⁶

⁴ Kitajima Daisuke, “Ōuchishi wa nani o tabeta ka: Shokuzai to shite dōbutsu riyō,” in *Chūsei shakai no kōzō*, vol. 4 of *Nihonshi kōza*, ed. Rekishigaku Kenkyūkai and Nihonshi Kenkyūkai (Tokyo: Tōkyō Daigaku Shuppankai, 2004), 130–32.

⁵ Sakurai Eiji, *Muromachibito no seishin*, vol. 12 of *Nihon no rekishi kōza* (Tokyo: Kōdansha, 2011), 239.

⁶ Yoshida Hajime, *Sake* (Tokyo: Hōsei Daigaku Shuppankyoku, 2015), 175–76.



Figure 2. Sake Cups. 20useruser19 / CC BY-SA (<https://creativecommons.org/licenses/by-sa/4.0>). Available from: https://upload.wikimedia.org/wikipedia/commons/e/ed/Three_sake_cups.jpg (Accessed August 7, 2020).

Would it be possible for anyone to drink 4.3 gallons of sake and survive? In 1900, the average weight of a twenty-year old Japanese male was 53 kg (117 lb), according to the Ministry of Education which began recording those statistics that year.⁷ Assuming premodern sake had a lower ABV than modern sake around the level of a table wine at 14%, then that 117 lb male would consume a lethal amount of sake after polishing off just a third of a gallon.⁸ Even if we assume that the aforementioned sake drinkers were fatter and imbibed over a long period of time, either the amount of sake they consumed must have been far more diluted than the modern beverage or their drinking prowess was embellished considerably, if not both. Otherwise the man who consumed 4.3 gallons of sake should be dead several times over if the story about him is true. Yet, without knowing the potency of medieval and early modern sake we cannot be sure of their fate. They might have been drinking the equivalent of near beer with .5% ABV.

Another related issue is how much rice was dedicated to sake brewing in premodern Japan. Historian Charlotte von Verschuer has put to bed the long-persisting assumption that rice was Japan's preeminent staple grain since it arrived in that country in the prehistoric period. She estimates that before the year 1700, rice accounted for only 25% of the diet of ordinary people who subsisted instead on other grains and foraged foods.⁹ Even in the first half of the twentieth century, when rice became more prominent in the diet of peasants,

⁷ "Weight by Age and Sex (F.Y.1900--2004)," Statistics Bureau, accessed January 7, 2020, warp.da.ndl.go.jp.

⁸ "Blood Alcohol Chart For Estimation," Alcometers, accessed January 7, 2020, breathalyzeralcoholtester.com.

⁹ Charlotte von Verschuer, *Rice, Agriculture, and the Food Supply in Premodern Japan*, translated and edited by Wendy Cobcroft (New York: Routledge, 2016), 299-300.

they typically consumed it in a porridge mixed with other grains and greens; and in some households only the men ate the rice leaving the women the millets and other fillers left in the pot.¹⁰ Estimates of rice production and consumption including von Verschuer's, however, are unable to account for the amount of rice destined for sake instead of the table. Jesuit missionary João Rodrigues who lived in Japan from 1577 to 1614 estimated that in the late sixteenth century, one-third of the rice in the country went to sake brewing.¹¹ Rodrigues also condemned drinking contests and the amount that Japanese imbibed in general, so his observation comes from someone critical of Japan's drinking culture. But, he offers a reminder that the greater the amount of rice that became a beverage, the less there was available for people to eat. Arizono Shōichirō estimates that 15% of the rice in the early modern period was grown for sake making.¹² By then, brewers in Itami near Osaka shipped between a million to 11.6 million gallons of sake annually to Edo, roughly the equivalent of a gallon to 11.6 gallons per person in that city of one million residents depending on the year.¹³ Itami may have been the most productive brewing region, but it was not alone. Edo had its own breweries and other regions sold their sake in the city. One samurai author of the early nineteenth century estimated that Edo's citizens consumed almost 30 million gallons of sake annually.¹⁴ This estimate was probably an exaggeration for an author critical of the wasteful spending he witnessed in Edo. How much sake was consumed per capita may never be accurately known, but the citizens of Edo clearly loved to tipple.

The Riddle of Recipes

The word sake appears in Japanese records in the eighth century, but the recipe has changed considerably over the centuries. For instance, brewers in the ancient and medieval periods sometimes added wood ash to sake, darkening the color and tempering the bitterness of an alcoholic beverage that fermented too quickly in the summer time. This method was used before sake brewing switched to the winter months exclusively in the early modern period.¹⁵

¹⁰ Eric C. Rath, *Japan's Cuisines: Food, Place and Identity* (London: Reaktion Books, 2016), 88-91.

¹¹ Harada Nobuo, *Rekishi no naka no kome to niku: Shokumotsu to tennō, sabetsu* (Tokyo, Heibonsha, 1993), 144.

¹² Arizono Shōichirō, *Kinsei shomin no nichijōshoku*, 48.

¹³ Yoshida Hajime, "Edo no sake jijō," in "*Okashi to osake no daigassen*" ten: Nishikie Taiheiki mochi sake tatakai, ed. Toraya Bunko (Tokyo: Toraya Bunko, 2002), 12.

¹⁴ Mark Teeuwen, Kate Nakai, et al., trans. *Lust, Commerce, and Corruption: An Account of What I Have Seen and Heard, by an Edo Samurai* (New York: Columbia University Press, 2014), 372.

¹⁵ Yunoki Manabu, *Sakezukuri no rekishi, shinsōpan* (Tokyo: Yūzankaku, 2005), 29-30.



Figure 3. Crucian carp lactic acid sushi (*funazushi*) and sake, Shiga Prefecture, 2019. Author photo.

Sushi is another dish that changed dramatically over the course of a millennium, to the point that what was first called sushi would likely be unrecognizable to most people as the same dish today. Like sake, the word sushi dates to the eighth century in Japan. The ingredients for making sushi appear in *The Procedures of the Engi Era* (*Engishiki* 延喜式), a collection of laws and customs completed in 927. The *Engishiki* indicates that sushi was made from rice, salt, and fish, but the exact way these ingredients were supposed to be combined was unstated.¹⁶ Based upon Chinese records, Japanese scholars infer that ancient sushi was made through lactic acid fermentation, a process of pickling the fish in salt and rice that took months, if not years, and gave it an extremely sour taste while rendering the bones soft enough to eat.¹⁷ The problem is that that Chinese source often cited as illustrative of sushi making in ancient Japan, *The Important Arts for the People's Welfare* (*Qimin yaoshu*) compiled in the mid sixth century and attributed to Jia Sixie, includes sake in its primary sushi recipe and adds spices such as orange peel. The same text suggest using the sushi in soups.¹⁸ Some early modern Japanese sushi recipes do contain sake, but not spices. Ancient Japanese sushi does not survive in the archaeological record, so we are left hunting for clues in textual evidence. Unfortunately, the first surviving Japanese recipes for sushi date to the early modern period. Thus, much of the history of sushi in Japan between the eighth and seventeenth century is based on inference and on assuming that changes in the words for sushi indicate a change in the recipe. For example, the word *namanare* 生成 / 生熟 first appears in a fifteenth century diary. Sushi scholars take that word translated as “fresh

¹⁶ Hibino Terutoshi, *Sushi no rekishi o tazuneru* (Tokyo: Iwanami Shoten, 1999), 26-27.

¹⁷ For a discussion of lactic acid sushi, see Eric C. Rath, “Some Tasting Notes on Year-Old Sushi: *Funazushi*, Japan’s Most Ancient and Potentially Its Most Up-to-Date Sushi,” *Gastronomica: The Journal for Food Studies* 20.1 (2020), 34-41.

¹⁸ Hsing-Tsung Huang, *Science and Civilisation in China*, vol. 6 *Biology and Biological Technology, Part V: Fermentation and Food Science* (Cambridge: Cambridge University Press, 2000); Huang views rice as the basis for all of the sushi recipes in the *Qimin yaoshu*, but there is scholarly debate about that point. Eric C. Rath, *Oishii: The History of Sushi* (London: Reaktion Books, forthcoming, 2021).

matured sushi” to mean that sushi eaters no longer waited the months (and sometimes years) for their sushi to undergo full lactic acid fermentation, and instead ate it only after a few weeks or days.¹⁹ But, surely some impatient or ravenous sushi eaters must have consumed their sushi “fresh matured” long before then. We do not know. What is clear is that ancient and medieval sushi were different from modern versions. The now globally famous nigirizushi consisting of a slice of fish on top of rice best eaten immediately after it is made did not debut until the early nineteenth century.



Figure 4. Nigirizushi. Nandaro / CC BY-SA (<https://creativecommons.org/licenses/by-sa/3.0>), Available from: https://upload.wikimedia.org/wikipedia/commons/f/fd/Sushi_Kanagawa_Japan_%282013%29.JPG (Accessed August 7, 2020).

The California Roll is now as well-known as nigirizushi, but its origins are also shrouded in mystery. The tasty combination of avocado, mayonnaise, rice, and imitation crab rolled up in nori can be found in sushi restaurants, supermarkets, and university cafeterias in the United States, making it the poster child for American sushi. Sushi scholars trace its origins to Los Angeles’s Little Tokyo, but disagree on when it was invented suggesting dates between 1962 to 1971.²⁰ Urban legend combined with the fact that the first mention of a California Roll in a newspaper article dates to 1979 means that the identity of the inventor of the iconic roll, if there was such a person, will likely remain a mystery.²¹ Today, the California Roll fights for attention with other rolls stuffed with all sorts of ingredients and topped with a variety of

¹⁹ Hibino, *Sushi no rekishi o tazuneru*, 50.

²⁰ James Farrer, Christian Hess, Mônica R. de Carvalho, Chuanfei Wang, and David Wank, “Japanese Culinary Mobilities: The Multiple Globalizations of Japanese Cuisine,” in *Routledge Handbook of Food in Asia*, ed. Cecilia Leong-Salobir (London: Routledge: 2019), 45, 47; Robert Ji-Song Ku, *Dubious Gastronomy: The Cultural Politics of Eating Asian in the USA* (Honolulu: University of Hawai’i Press, 2014), 44-47.

²¹ Jonas House, “Sushi in the United States, 1945–1970,” *Food and Foodways*, 26.1 (2018), 58.

colorful and spicy sauces whose origins are equally as obscure. As someone who has written about the history of sushi, I view these creative innovations as further evidence that sushi is one of the world's greatest anonymous cuisines, one that keeps evolving silently in new ways that few can predict and fewer still can (or should) take credit for.

Restaurants Don't Save Menus

If the sushi restaurants of Los Angeles's Little Tokyo had preserved their menus then we might be able to know once and for all the identity of the inventor of the California Roll, but restaurants are poor record keepers, at least when it comes to menus. Much of the supposition that Edo-period nigirizushi was more than twice as large than the nigirizushi of today is derived from an early twentieth century cookbook written by Koizumi Seizaburō 小泉清三郎 (1884-1950). Koizumi was the grandson of Hanaya Yohe'e 華屋与兵衛, the person many view as the inventor of pressing fish on top of rice and calling it nigirizushi.²² Koizumi continued the

restaurant started by and named after his great grandfather through the early twentieth century, even reopening it after the Great Kantō Earthquake in 1923. Yet, the records of that establishment, which could shed much light on the history of sushi, do not survive. Kyoto has many old restaurants that have been in the same family for centuries. The owners of these establishments take pride in their pedigrees and in their age-old collection of serving ware and other artistic treasures in their storehouses. But when it comes to documents, these restaurateurs have little to show either because their forbearers never kept any records or because they are unwilling to reveal these papers to scholars.²³ I suspect the former, because



Figure 5. California Roll. Mk2010 / CC BY-SA (<https://creativecommons.org/licenses/by-sa/3.0>). Available from: https://upload.wikimedia.org/wikipedia/commons/1/19/California_Rolls.JPG (Accessed August 7, 2020).

²² Koizumi Seizaburō, *Katei sushi no tsukekata* (Tokyo: Ōkura Shoten, 1910).

²³ This was my experience interviewing Kyoto restaurant owners for my book *Food and Fantasy in Early Modern Japan* (Berkeley, CA: University of California Press, 2010). Japanese scholars have likewise reported a lack of archival materials from restaurants in Kyoto and Osaka, Okumura Ayao, "Ryōriya no ryōri," in *Ryōriya no kosumorojii*, ed. Takada Masatoshi (Tokyo: Domesu Shuppan, 2004), 58. One exception is the Kyoto restaurant Mankamerō 萬亀樓, which holds the

the centuries-old restaurants from Kyoto are always keen to remind prospective diners of their history, and displaying something like an old menu would be an ideal way to do that were one available.



Figure 6. Restaurant Interior, Hachinohe, Aomori Prefecture (2018). Author photo.

Fortunately, some ardent collectors have saved historical menus and restaurant ephemera. The New York Public Library allows online access to its menu collection with over 17,500 menus digitized as of June 2020 (menus.nypl.org). The library at the University of Toronto Scarborough houses the Harley J. Spiller collection of Chinese takeout menus, soon to be made available digitally online (utsc.library.utoronto.ca). And the Culinary Institute of America has over 30,000 menus in its collection, many of which can be viewed online (ciadigitalcollections.culinary.edu). Among the hundreds of culinary texts published in the early modern period in Japan, menu collections (*kondateshū*) form a significant genre. But unlike restaurant menus which list dishes that were actually served to customers, these early modern Japanese menu collections were meant to be a “fantasy with food” offering readers a vision of the possibilities for banqueting in ways that they could never afford or create in real life.²⁴ These descriptions of elaborate meals were a form of gastro pornography that titillated the reader, but ultimately left them unsatiated. How readers actually satisfied their gastronomic desires remains an open question.

The Meat Question

The history of meat eating in the premodern period is, as food scholar Katarzyna Cwiertka noted, “one of the most contentious aspects in Japanese history.”²⁵ It is contentious because

document collection of the Ikama 生間 school of ceremonial cuisine (*hōchō shiki* 包丁式).

²⁴ Rath, *Food and Fantasy in Early Modern Japan*, 122-23.

²⁵ Katarzyna J. Cwiertka, *Modern Japanese Cuisine: Food, Power and National Identity* (London: Reaktion Books, 2006), 24.

scholars have tried to explain an absence. Available evidence suggests that animal protein was only a minimal part of the diet in premodern Japan. In 1900, when more reliable record keeping begins, annual per capita meat consumption comprised mostly of beef was only 800g.²⁶ So why didn't the Japanese eat meat? Buddhist prohibitions against taking life are often cited for Japanese aversions to meat historically. But Buddhist influences in China and Korea never stopped their populations from consuming animals, and fish have long been viewed as a prominent part of the diet in Japan. Historians like Harada Nobuo have argued that the ancient state made meat eating taboo viewing it as inimical to rice agriculture. Harada cites a proclamation by Emperor Temmu in 675 that prohibited the consumption of horse, cow, dog, monkey, and chicken and set some seasonal limits on fishing.²⁷ For Harada, the emperor's prohibition provides evidence why meat, with some exceptions like fish, was not on the Japanese premodern table. Yet, archaeological discoveries since the 1980s have led to wider acceptance that meat eating was much more prevalent in premodern Japan than was once assumed.²⁸ After all, how else does one explain piles of cut and gnawed bones in medieval and early modern trash pits? In that light, Temmu's prohibition should be reinterpreted as only affecting court ceremonies and not as a ban on meat eating for commoners, who continued to devour whatever animal life was available to them.²⁹ Just as Charlotte von Verschuer has argued that the prevalence of foraging and other grains in the diet in the ancient and medieval period cannot be fully known by reading the documentary record, which focuses largely on rice as the unit for taxation and for its prominence in the diet of the elite, so too must have commoner consumption of meat escaped the attention of the elite.³⁰ Thankfully, archaeology is shedding more light on the question of the extent of meat eating. For instance, excavations of early modern Edo reveal the bones of fox, racoon dogs (*tanuki*) and otters.³¹ Specialty stores in Edo sold these beasts as well as fox, deer, monkey, boar and pork as "medicinal foods."³² In that light, the question should change from why the Japanese did not eat meat in premodern Japan, into how scholars can ascertain the amount of meat that was consumed.

²⁶ Vaclav Smil and Kazuhiko Kobayashi, *Japan's Dietary Transition and its Impacts* (Cambridge, MA: The MIT Press, 2012), 49.

²⁷ Harada Nobuo, "'Kome shikō' saikō," in *Shokubunka kara shakai ga wakaru*, ed. Yano Keiichi. (Tokyo: Seikyūsha, 2009), 31-33, 36-37.

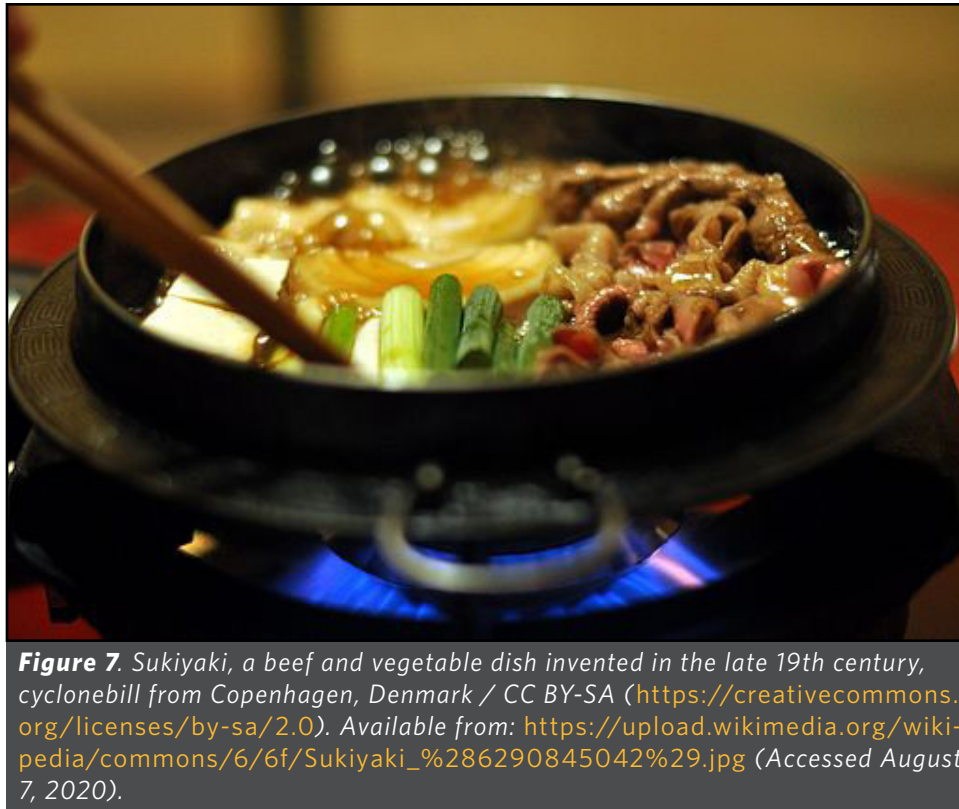
²⁸ Matsui Akira, "Dōbutsu kōkogaku kara mita chūsei no dōbutsu riyō," in *Dōbutsu to chūsei: Eru, tsukau, kurau*, ed. Ono Masatoshi, Gomi Fumihiko, Hagihara Mitsuo (Tokyo: Koshi Shoin, 2009), 19-21.

²⁹ Hirabayashi Akihito, *Kamigami no nikushoku to kodaishi* (Tokyo: Yoshikawa Kōbunkan, 2007), 225.

³⁰ von Verschuer, *Rice, Agriculture, and the Food Supply in Premodern Japan*, 8, 133.

³¹ Junzō Uchiyama, "San'ei-chō and Meat-Eating in Buddhist Edo," *Japanese Journal of Religious Studies* 19.2 (1992), 30.

³² Ehara Ayako, *Katei ryōri no kindai* (Tokyo: Yoshikawa Kōbunkan, 2012), 18.



Japanese food history abhors a vacuum. Where there is a gap in the sources, someone will fabricate a story, often casting a prominent cultural figure to fill the role as inventor. Scholars seeking to write a history of the multi-course *kaiseki* 会席 meal in the 1930s looked to tea master Sen no Rikyū (1522-1591) as the person who they asserted had perfected an earlier style of dining also called *kaiseki* (but written as 懷石) for the tea ceremony. The attribution paid homage to the tea schools who claimed Rikyū as their founding patriarch and published the scholars' research; and the story stuck to this day in the secondary literature even though its evidentiary base is entirely apocryphal.³³ Rikyū's contemporary, the warlord Uesugi Kenshin (1530-1578), has been credited with inventing *nattō* when soybeans were said to have fermented for the first time on a straw saddlebag on Kenshin's horse.³⁴ Others claim that Shogun Minamoto no Yoritomo (1147-1199), the founder of the Kamakura warrior government, accidentally created the same dish the same way four centuries earlier.³⁵ It is stories such as these surrounding food that fire the imagination, and gives depth to food in Japanese culture, raising it to the level of a cuisine on occasion. The same stories also prompt the food historian to probe the more complicated picture of the past, a process that depends on the availability of sources for its success.

³³ Rath, *Japan's Cuisines*, 34-64.

³⁴ Higuchi Kiyoyuki, *Shokumotsu to Nihonjin* (Tokyo: Kodansha, 1979), 48.

³⁵ Kawano Shinjirō, *Chūsei toshi Kamakura: Iseki ga kataru bushi no miyako*. Tokyo: Kōdansha, 2005, 223.

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