AFD Ep 416 Links and Notes - Industrial Cheeses [Bill/Rachel] - Recording Feb 27, 2022

- Intro On this week's episode we are talking about cheese, and how the Second Industrial Revolution helped paved the way for some of our favorite cheesy foods and snacks. We're taking a deep dive on cream cheese and two of the most famous cream cheese foodstuffs: crab rangoon and cheesecake. In the second half of the episode, Bill discusses government cheese. Although it has taken on a mythic quality, it was a real food item. [Patreon plug]
- [Rachel] Cream Cheese: https://en.wikipedia.org/wiki/Cream_cheese#United_States cream cheese was a second industrial revolution invention (literally a mass production industrial cheese product) and the original was what ended up branded as "Philadelphia" with foil wrappers
 - William A. Lawrence of Chester, New York, was the first to mass produce cream cheese in 1873. In 1872, he had acquired a Neufchatel factory, and added more cream to the Neufchatel recipe, creating cream cheese. Cream cheese, unlike Neufchatel, does not require aging, and is meant to be consumed fresh. In 1877, Lawrence created the first brand of cream cheese, known as Neufchatel and Cream Cheese, and there was a logo of a cow silhouette. Lawrence's cream cheese was a success, and in 1879, he joined up with Samuel S. Durland, another Chester merchant, built a larger factory, and Lawrence & Durland began to sell their cream cheese. In 1880, their cheese was distributed by Alvah Reynolds, a New York cheese distributor, and he gave the Lawrence & Durland cheese the name "Philadelphia Cream Cheese". By the end of 1880, demand exceeded supply, and Reynolds began to sell another manufacturer's cheese, Charles Green who also hailed from Chester under the Philadelphia brand.
 - In 1892 Reynolds bought the Empire Cheese Co. of South Edmeston, New York, to produce cheese under his "Philadelphia" label. When the Empire factory burned down in 1900, he asked the newly formed Phenix Cheese Company to produce his cheese, instead. In 1903 Reynolds sold rights to the "Philadelphia" brand name to Phenix Cheese Company, which was under the direction of Jason F. Whitney, Sr. (It merged with Kraft in 1928). By the early 1880s Star cream cheese had emerged as Lawrence & Durland's brand, and Green made World and Globe brands of the cheese. At the turn of the 20th century, New York dairymen were producing cream cheese sold under a number of other brands, as well: Triple Cream (C. Percival), Eagle (F.X. Baumert), Empire (Phenix Cheese Co.), Mohican (International Cheese Co.), Monroe Cheese Co. (Gross & Hoffman), and Nabob (F.H. Legget)
 - Crab rangoon

https://www.atlasobscura.com/articles/what-is-crab-rangoon
Crab rangoon is cream cheese and artificial crab spooned into wonton
wrappers, twisted into pouches, then deep-fried, served with orange
sweet-and-sour sauce. To understand its origins, we have to go back to
the early 20th Century. As we've discussed on previous episodes,
anti-Chinese racism led to immigration quotas that greatly restricted how
many Chinese immigrants could enter the US annually. However, there
were "merchant visas" available, where Chinese-Americans could bring
in workers from China. In 1915, courts ruled that restaurant owners were
allowed into this merchant visa program, and an explosion of Chinese
restaurants ensued. Between 1910 and 1920, it's estimated that the
number of Chinese restaurants quadrupled.

As Chinese restaurants took hold in the US, a Chinese-American cuisine started to form. Oil for deep-frying was cheap, as were chicken breasts,

an ingredient not highly prized in Chinese cooking. Other traditional ingredients, such as szechuan peppercorns, were prohibitively expensive and/or difficult to obtain. Also, chefs were catering toward a white palette, so they would often sweeten dishes and cut out a lot of spice altogether. Other dishes were invented in the US, such as chop suey and General Tso's chicken. The Chinese American restaurant menu as we know it today really solidified in the 1950s.

Another mid-century cultural phenomenon was tiki culture. Tiki culture began in the 1930s as a sanitized version of South Pacific culture that was portrayed in Hollywood and marketed to tourists of places such as Hawaii and Polynesia. As WWII veterans came back from the Pacific theater in the 1940s, tiki culture grew in popularity. One of the most well-known purveyors of tiki culture was Victor Bergeron, the founder of Trader Vic's tiki bars. Bergeron opened the first Trader Vic's in 1937, selling tiki cocktails and a menu that was heavily influenced by Joe Young, a Chinese-American barback. Alongside a few dishes that nodded to South Pacific cuisine (pineapple spareribs and pineapple chicken) were "Trader Vic's Fried Rice" and Mo Goo Mein.

Bergeron experimented with the menu, and in the 1940s started putting things in wonton wrappers and started deep-frying them. From there it is believed that the crab rangoon was born. Vic's recipe differs from the crab rangoon seen in Chinese American restaurants today: his features A-1 Steak Sauce and Lingham's Chili Sauce mixed in with real crab and cream cheese.

As both tiki and Chinese restaurants enjoyed immense popularity throughout the 50s and 60s, they heavily borrowed from each other's menus. However, as tiki culture faded into obscurity, the crab rangoon lived on in Chinese American restaurants across the country. Best line in the article: *Crab rangoon is, after all, a preposterous dish.*

Cream cheese-based cheesecake https://www.juniorscheesecake.com/blog/2016/07/27/the-history-of-cheesecake/

Before the invention and proliferation of cream cheese, cheesecakes were made with curd cheese, such as ricotta, cottage cheese, mascarpone, or German quark. These cakes had a coarse texture and a fairly bland flavor, enhanced with flavorings such as lemon, vanilla and rosewater. An early mention of cream cheese was published in the August-September 1909 issue of *The Boston Cooking-School Magazine*, where bakers were instructed to send "Neufchatel or cream cheese through a ricer". However, curd cheese was the base of choice for cheese cakes until the 1930s. In the 1920s, stabilizers such as guar or carob gums were added to cream cheese to help it stay emulsified; without them, the cream cheese would separate into fat and water. Cheesecake made with cream cheese without these stabilizers would often have a grainy texture. Cream-cheese based cheesecake was popularized in New York in the 1930s, and New York-style cheesecake remains popular to this day.

- American cheese, its other processed cheese product cousins, and the Kraft industrial food monopoly: https://en.wikipedia.org/wiki/American_cheese Traditional cheese is ground, combined with emulsifying agents and other ingredients, mixed and heated until it forms a "melted homogeneous" mixture. To pasteurize it, the cheese mixture must be

heated to a temperature of at least 150 °F (66 °C) for a minimum of 30 seconds. Composition requirements of processed American cheese control the percentage of milkfat, moisture, salt and pH value in the final product, along with specifications for flavor, body and texture, color, and meltability.

Processed American cheese is packaged in individually wrapped slices, as unwrapped slices sold in stacks, or in unsliced blocks. Individually wrapped slices are formed from processed cheese which solidifies only between the wrapping medium.

- Kraft specifically was the person/entity that introduced the new industrial, assembly-line Processed Cheese concept to the United States from Switzerland: https://en.wikipedia.org/wiki/Processed cheese Processed cheese was first developed in Switzerland in 1911, when Walter Gerber and Fritz Stettler, seeking a cheese with longer shelf life and influenced by cheese sauces such as those used in fondue, added sodium citrate to melted Emmentaler cheese and found that the emulsified cheese sauce could be re-cooled into a solid again. Shortly after, in 1916, Canadian-American businessman James L. Kraft applied for the first U.S. patent covering a new method of processing cheese, which halted the maturation process.
- The early competitor to Kraft American was Velveeta and you won't be surprised to learn that barely a decade later they were acquired by Kraft. https://en.wikipedia.org/wiki/Velveeta Velveeta was invented in 1918 by Emil Frey of the "Monroe Cheese Company" in Monroe, New York. In 1923, "The Velveeta Cheese Company" was incorporated as a separate company. In 1925, it advertised two varieties, Swiss and American. The firm was purchased by Kraft Foods Inc. in 1927.
 - The product was advertised as a nutritious health food. In the 1930s, Velveeta became the first cheese product to gain the American Medical Association's seal of approval.
 - The name Velveeta is meant to connote a "velvety smooth" food. Its smoothness and meltability are its main selling points.
- Canned cheese spray: https://en.wikipedia.org/wiki/Easy_Cheese The product was first manufactured by Nabisco and sold under the name "Snack Mate" from 1965 until 1984. Advertisements often displayed the orange product adorned in flowy peaks atop several different types of appetizers. As a 1966 advertisement says, it was "instant cheese for instant parties."
- Powdered cheese:
 - https://www.newyorker.com/tech/annals-of-technology/object-of-interest-cheese-powder (November 2013)
 - https://www.wired.com/2015/08/us-military-helped-invent-cheetos/

The first real cheese powder was developed in 1943 by George Sanders, a USDA dairy scientist. (Even before the war began, USDA's research facilities had been enlisted to work toward military goals, exhorted by Secretary of Agriculture Henry Wallace "to consider their possible contributions to national needs as the defense program approaches the stage of 'maximum effort." This relationship continues to this day; the USDA has collaborated with the Quartermaster Corps and later the Natick Center on topics as varied as chemical testing, fungi collection and classification, potatoes, dairy, and, from 1980 on, operation of the army's radiation food sterilization program.)

Until then, it had been "considered impossible to dehydrate natural, fat-containing cheese," because the heat melted the fat, which then separated out. Sanders's innovation was to divide the process into two steps. In the first, the cheese, shredded or grated, was dried at a low temperature; this hardened the surface

proteins of the particles, forming a protective barrier around the lipids. Once sufficient water had been evaporated, the cheese was ground and dehydrated at a higher temperature. The final step was to form it into what the patent describes as cakes. A 1943 war bond ad unveiled the product to the public with a picture of a bare-chested solider feeding a second soldier bundled up in a parka with a cheese cake on a pointy stick.

A number of companies claim to have soon led the way in cheese powders, in particular a Danish processed-food company, Lactosan. According to the company, after one of its customers returned an order of processed cheese because he had nowhere to store it, a factory manager, Christian Jessen, began experimenting with melted cheese and industrial spray-driers, producing what we recognize as modern cheese powder in 1951; it was so successful that the company gave up manufacturing regular processed cheese to focus on powder. In the United States, Commercial Creamery, the proud owner of cheesepowder.com, claims to have "pioneered the manufacturing of cheese powders for the food industry over sixty years ago."

- Colby cheese (1880s): https://en.wikipedia.org/wiki/Colby_cheese
 In 1882, Ambrose and Susan Steinwand established a cheese factory near Colby, Wisconsin, on a 160-acre (65 ha) site they had purchased five years before. The Steinwands' son Joseph developed the cheese at the factory in 1885 when he was handling a batch of cheeddar cheese and washed the curd with cold water. There are differing accounts on whether the creation was intentional. According to some sources, Joseph had attended a cheesemaking.course.course.course.go. and was specifically interested in developing a new type of cheese; according to others, he neglected to drain the excess moisture after adding cold water and accidentally discovered the result. [2][3] The resulting cheese, which was moister than cheddar, was named after the nearby city and quickly became popular because it did not involve the complicated cheddaring.course.go. process. By 1896, the family was producing US\$3000 (equivalent to US\$93,324 in 2020) worth of cheese each year.
- [Bill] Government Cheese:
 - Another industrial cheese topic is Government Cheese, a part of a price stability program, which I want to tie in to my 1970s bonus series (because it's an example of the post-70s policy solutions meant to get around the problems instead of dealing with them directly, in this case via government-commissioned cheese blocks to food assistance programs instead of price controls and a welfare state): https://en.wikipedia.org/wiki/Government_cheese
 - Commodity Credit Corporation: The cheesy story all started in 1949, when the Agricultural Act of 1949 gave the Commodity Credit Corporation, a government-owned corporation dedicated to stabilizing farm incomes, the authority to purchase dairy products like cheese from farmers. The CCC had been around since the Great Depression, when it was created as part of the New Deal's attempt to stabilize prices and help farmers. During the 1970s, as Americans sat in long gas lines and watched the economy tank, they faced another crisis: an unprecedented shortage of dairy products. In 1973, dairy prices shot up 30 percent as the price of other foods inflated. When the government tried to intervene, prices fell so low that the dairy industry balked. Then, in 1977, under President Jimmy Carter, the government set a new subsidy policy that poured \$2 billion into the dairy industry in just four years. Suddenly, dairy farmers who had been hurting were flush with cash—and producing as much milk as they

could in order to take advantage of government support. The government purchased the milk dairy farmers couldn't sell and began to process it into cheese, butter and dehydrated milk powder. As dairy farmers produced more and more milk, stockpiles ballooned. As anthropologist Bradley N. Jones notes. eventually the stockpile hit over 500 million pounds, stored in hundreds of warehouses in 35 states. [...] As officials scrambled behind the scenes to figure out how to deal with the cheese, the cheesy conundrum became public when Agriculture Secretary John R. Block showed up at a White House event with a five-pound block of greening, moldy cheese and showed it to the press. "We've got 60 million of these that the government owns," he said. "It's moldy, it's deteriorating ... we can't find a market for it, we can't sell it, and we're looking to try to give some of it away." As the public got wind of the existence of all that surplus cheese, it began to sharply criticize President Ronald Reagan. He had been elected in part by bandying about inaccurate stereotypes of "welfare queens" and poor people who gamed the system, and earlier in 1981 had pledged to reduce the federal food stamp program. There were hungry Americans still suffering from the aftereffects of the recession. Why not give them the cheese?

https://www.history.com/news/government-cheese-dairy-farmers-reagan

- See also: US food purchase and farm stabilization programs began in the New Deal in 1933 but the Commodity Credit Corporation was reorganized after new legislation in 1948 just ahead of Truman's Fair Deal period: https://en.wikipedia.org/wiki/Commodity_Credit_Corporation
- In the 1970s, the USDA stepped in to help control volatile milk prices, and it became very profitable to produce milk. So, farmers started producing way too much of it, which was then turned into way too much cheese. In [late] 1981, then-President Ronald Reagan declared 30 million pounds of American cheese would be distributed to food pantries, school lunch programs and other welfare programs. By 1984, the U.S. was storing about 5 pounds of cheese for every American.
 - https://www.cnbc.com/2019/02/11/government-cheese-phenomenon-usda-americ an-cheese-surplus.html
- The program was not just limited to cheese blocks. There was also government butter, powdered milk, flour, and more.
- The USDA has publicly published documents with the specs to producers about the production and storage methods and what does or does not constitute government cheese. It is either an American cheddar cheese or a Colby cheese, both of those being US-invented Second Industrial Revolution cheeses. Some of the guidelines for production are very specific, with precise requirements about salt, moisture, pH, milkfat, temperature, and so on. But some are extremely vaque, such as "Its flavor shall be pleasing and characteristic of process cheese made from mild to medium cured American cheese, and shall be free from undesirable flavors and odors." Or: "The body shall be smooth, medium firm, resilient, and free of pinholes, crystals or openings except those caused by trapped steam. Its texture shall be close and free from lumps, graininess, or uncooked particles, must slice freely, show not more than slight brittleness or roughness, and the cheese shall not stick to the knife or break when cut into approximately 1/8-inch slices." This meant it tended to be used in melted form such as nachos, grilled cheese sandwiches, mac & cheese, and omelets. Another quote: "The process cheese shall have a uniform medium yellow color and an attractive sheen. No visible signs of mold shall be permitted."

- In the 90s, when the herd buyouts ended and the dairy market stabilized, there was little need for the government to continue its cheese hoarding. According to Ken Vorgert, chief of the Dairy Grading Branch of the USDA's Agricultural Marketing Service, the donation programs dwindled once the government no longer had its cheap reserves.
 - https://www.vice.com/en/article/wn7mgq/wtf-happened-to-government-cheese
- However, the private sector continued to try to figure out how to non-governmentally unload dairy surpluses in the 1990s (with USDA approval and some financing), which led directly to very public things like the famous or infamous "Got Milk?" ad campaigns as well as to much less public developments, such as dairy industry specialists working directly inside giant corporate fast food chains to develop new fast food products with higher dairy content, "including Domino's seven-cheese pizzas and Taco Bell's very cheesy Quesalupa." This didn't exactly help with improving nutritional intake quality in urban food deserts where poor and minority populations were consuming a lot of fast food. And as we will circle back to in a moment, the private sector alone was only able to absorb dairy surpluses for so long.
 - https://psmag.com/economics/what-will-the-us-government-do-with-1-4-billion-pounds-of-cheese
- Bobbi Demsey published a beautiful essay in August 2018 at TasteCooking.com entitled "The Tyranny and the Comfort of Government Cheese," saying that it was "both a cornerstone of survival and an object that inspires complicated tinges of nostalgia" for those who grew up poor in the 1980s and early 1990s. "The telltale brick-shaped carton encasing a Dayglo orange matter that provided equal parts sustenance and humiliation: government cheese." The essay also talks about the many continued pop cultural references to it in music and even served on Wahlburgers chain burgers because the Wahlberg family grew up eating it. The essay also notes that in recent years, under the Trump Administration, government cheese returned to programs that provide food to elderly people and a plan was floated to give it to SNAP recipients in a prepared box of various surplus farm products but only if the SNAP benefits were cut in half each month instead. Obviously a bad and cruel plan.
 - This development followed late Obama-era reorganization of regular farm subsidies but also a round of Trump-era "ad hoc" farm subsidies, generally flowing to major agribusiness corporations, supposedly to offset effects of a trade war with China. Some of this was suspended when Biden took office:
 - https://www.ewg.org/interactive-maps/2021-farm-subsidies-ballooned-under-trump/
 - In 2020, 39% of all net farm income in the United States came from direct government aid, including not just subsidies but also CARES Act aid, which led not merely to relief from bankruptcy risk that some farms had been facing before the pandemic but in fact to record profits in 2020: https://www.cato.org/commentary/examining-americas-farm-subsidy-problem
- By 2019, the US dairy surplus had returned stronger than ever with 1.4 billion pounds of cheese in storage. This is not just a result of production levels but also declining demand as Americans have cut dairy and especially processed cheese from their diets in greater quantities.
 - https://psmag.com/economics/what-will-the-us-government-do-with-1-4-billion-pounds-of-cheese

A Vice magazine article from 2014 and republished in February 2018 recalled that one of the other pop culture references to government cheese was about one of its nastier side effects that government policymakers had apparently not taken into consideration: Perhaps more importantly, any type of cheese can be problematic for the digestive systems of millions of Americans. According to the University of Georgia, 75 percent of African-Americans, 51 percent of Latinos, and 80 percent of Asian-Americans are lactose-intolerant, versus the 21 percent of Caucasians. And because minorities historically have been heavily represented in welfare programs, the government wasn't really doing Americans' butts a favor. This lactose intolerance problem from government cheese consumption was apparently referenced in a sketch from the 90s Black sketch comedy show "In Living Color."