The History of Cheese



Early Cheese History

The Neolithic period (c. 10,000–2,000 BCE) marked a culinary milestone with the intentional creation of cheese. Archaeological finds include holed pottery shards from Urnfield pile dwellings near Lake Neuchâtel, Switzerland—likely early cheese strainers—and clay pots with the oldest physical cheese remains from the Dalmatian Coast.

In Mesopotamia, the cradle of Assyrian and Babylonian civilizations, cheese-making began as early as 6,000 BCE, possibly discovered when milk stored in sheep-stomach containers curdled due to natural enzymes. Evidence includes a Tell al-Ubaid fresco showing cow milking and milk straining, and clay tablets from 3000 BCE in Ur documenting cheese and butter production. These innovations supported permanent settlements and culinary traditions that spread widely.

The Romans advanced cheese-making, as described by two major writers. Cato the Elder's *De agri cultura*, his only surviving work, includes recipes for globi (ricotta and honey fritters) and three cheesecakes: the Greek-style placenta, poppy-seed savillum, and honey-baked libium. Pliny the Elder's *Naturalis Historia* records practical cheese knowledge: cow's milk yields twice as much cheese as goat's; goat cheese benefits from smoking; and animals with teeth on both jaws don't produce usable milk. He praised cheese from Nemausus (modern Nîmes, France),

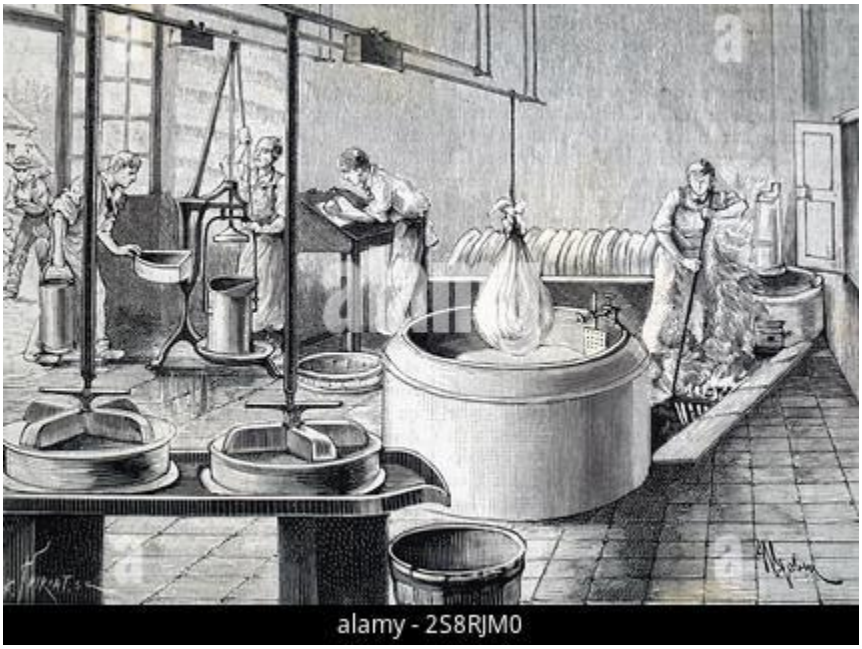
showing the early development of refined regional tastes that would shape European cheese traditions.

Later Developments in Cheesemaking

Louis Pasteur's pioneering work in microbiology revolutionized food safety and laid the foundation for modern cheesemaking. His key contribution to dairy science was the development of pasteurization, a process that heats milk to specific temperatures for set periods to eliminate harmful bacteria while preserving nutritional value and flavor. This breakthrough saved countless lives and improved global dairy safety. In 1987, its importance was cemented in U.S. food policy when the FDA required all milk and milk products sold through interstate commerce to be pasteurized.

Homogenization transformed the dairy industry not by enhancing safety, but by preventing cream separation. The process disperses fat globules evenly throughout milk, creating a uniform texture and appearance. Auguste Gaulin patented the first homogenization machine and showcased it at the 1900 Paris World's Fair. His invention caught the attention of Robert Manton Burnett, who helped introduce the method to the U.S. and later partnered with Gaulin to form a company bringing the technology to American dairy processors. In the 1920s, homogenization advanced further with the introduction of "annular orifices," a major improvement over earlier capillary tube systems.

The Science of Cheesemaking



Cheese production involves coagulating milk, traditionally using rennet, which has been used for millennia. Homer noted in *The Iliad* that the Ancient Greeks used fig juice extract similarly. Rennet, derived from the fourth stomach of young ruminants like calves, contains enzymes that

bind milk proteins into curds. Today, fewer than five percent of U.S. cheeses use animal rennet, as bacterial chymosin has largely replaced it.

Thermophilic bacteria, which thrive at high temperatures that kill other cultures, are vital for certain cheeses. While starter cultures for cheeses like Cheddar and Brie prefer moderate temperatures, thermophiles like *Lactobacillus helveticus* thrive above 40°C (104°F). They're key to cooked-curd cheeses and high-heat techniques like the pasta filata stretching used for mozzarella. These bacteria create the textures and flavors of cheeses such as Gruyère and Emmental.

Brining is a common aging method, where fresh cheese is soaked in saltwater to reduce surface moisture and encourage beneficial microbes while limiting harmful ones. The salt creates an osmotic gradient that draws moisture from the cheese's surface, helping to preserve it and firm up the rind. In washed-rind cheeses like raclette and Taleggio, brining fosters *Brevibacterium linens*, which produces their orange-red rinds and strong aroma. Cheesemakers may also add calcium chloride to the brine to help maintain curd structure.

Regional Cheeses and Dishes

Europe

The Protected Designation of Origin (PDO) system is a key European effort to protect traditional cheesemaking. Created by EU Regulation 510/2006 and rooted in France's 1925 AOC laws, it ensures that only cheeses made in specific regions using traditional methods can use certain names. Based on the concept of *terroir*—the unique mix of geography, climate, soil, and local knowledge—PDO products must prove their quality and character are tied to their origin. This system protects producers and consumers by preventing imitations that could harm the reputation of authentic regional cheeses.

France

France's vast variety of cheeses is central to its cultural identity. French cheese production is regulated through four categories: industrial, cooperative, artisanal, and farmhouse. This diversity inspired President Charles de Gaulle's 1962 remark: "How can you govern a country which has two hundred and forty-six varieties of cheese?" A popular saying even claims France makes a different cheese for every day of the year.

France leads the world in AOC (Appellation d'Origine Contrôlée) cheeses, which protect the authenticity and regional traits of traditional varieties. Examples include Munster from Alsace and Neufchâtel from Normandy, both reflecting centuries of local expertise. France is also renowned for its goat cheese, or *fromage de chèvre*.

Cheese has featured in French cuisine for centuries. A 1393 cookbook, *Le Ménagier de Paris*, contains the earliest known recipe for a mozzarella stick—cheese cooked in wine—an ancestor of today's fried version.

One of France's most iconic cheeses, Camembert, is credited to Norman cheesemaker Marie Harel. According to legend, she learned refined techniques from Abbé Charles-Jean Bonvoust, a priest she sheltered during the French Revolution. Her cheese gained fame after Napoleon III reportedly declared it exceptional during a visit to Normandy.

Brie: Brie, a cow's milk cheese, is one of France's oldest and most prestigious cheeses. Brie de Meaux dates to the seventh century, marking over 1,300 years of cheesemaking in Northern France. Charlemagne reportedly tasted it in 774 and arranged for two cartloads to be delivered annually to Aachen. At the 1815 Congress of Vienna, Talleyrand called it the "king of cheeses." Brie's distinctiveness comes from aging in natural caves or cellars, producing its white, bloomy rind and creamy interior. Though similar to Camembert, Brie has a milder, more delicate flavor.

Mimolette: Developed under Louis XIV to support Jean-Baptiste Colbert's mercantilist policies, Mimolette was created as a French alternative to Dutch Edam to keep money within France. Originally colored with carrot juice, it was known as *Vieux Hollande* until the 20th century, when it was renamed for its "semi-soft" texture. Its aged flavor comes from cheese mites added to the rind—a feature that led to a brief U.S. import ban in 2013.

Roquefort: France's first AOC-certified cheese, Roquefort received this status in 1925, building on protections dating to 1411, when King Charles VI granted the town exclusive production rights. Made only from Lacaune sheep's milk, it gains its complex flavor from Penicillium roqueforti, a mold found solely in local caves where the cheese is aged.

Italy

Italian cheese is one of the country's most celebrated culinary exports, central to iconic dishes like pizza. The classic Neapolitan style, developed in Naples, was first topped with mozzarella by Raffaele Esposito. Variants like quattro formaggi typically include gorgonzola. Italy's cheese repertoire also includes caprino, a goat cheese reflecting Mediterranean traditions, and hybrid varieties like Bastardo del Grappa, which blend goat's milk with other sources.

Cheese even appears in Italian art. Renaissance painter Vincenzo Campi, known for his Flemish-influenced style, featured cheese in several works. *The Ricotta Eaters* centers on cheese as the main subject, while *Kitchen* shows a woman grating cheese amid preparations for a feast. Campi's self-portrait depicts him as Pantalone with other *commedia dell'arte* characters eating skull-shaped white cheese.

Parmigiano-Reggiano: Known as the "King of Cheeses," Parmigiano-Reggiano takes its name from Parma and Reggio Emilia, where its production has been tightly regulated for centuries. Originating in the 13th century with Benedictine monks in Emilia, it gained fame by 1348 when Boccaccio imagined a mountain of grated Parmigiano in *The Decameron*. Since 1953, Credito Emiliano has accepted its wheels as collateral for small business loans. True Parmigiano-Reggiano is still produced only in designated regions of northern Italy, using traditional methods. Each wheel is aged at least 12 months—often 24 or more—to develop its signature crystalline texture and rich, nutty flavor.

Casu Marzu: Casu Marzu is a Sardinian sheep's milk cheese derived from pecorino and known for its intentional infestation with cheese fly larvae, which break down the cheese and create its pungent flavor and soft texture. Banned in Italy since 1962 due to health risks like enteric pseudomyiasis, it is still made and consumed illicitly by enthusiasts. Despite its illegal status, Casu Marzu remains a symbol of Sardinian identity and is believed locally to have aphrodisiac qualities.

Switzerland



Switzerland's cheesemaking heritage dates back over two millennia, with its cheeses praised as early as Roman times. Pliny the Elder mentioned Swiss cheese as *Caseus Helveticus*, cementing the region's dairy reputation. Swiss cheese is best known for its signature holes, or "eyes"—once seen as flaws, now prized as signs of proper aging. The country produces both famous and lesser-known varieties, such as Ziger, a ricotta-like cheese from the Emme Valley made as a by-product of traditional cheesemaking. Switzerland also pioneered iconic dishes like fondue, with 17th-century Zurich recipes featuring Gruyère.

In the U.S., “Swiss cheese” became a generic term for cheeses resembling Emmental. Its holes, or “eyes,” result from carbon dioxide released by bacteria and trapped particulate matter. Versions without holes are called “blind” Swiss. American varieties developed to suit local tastes, including baby Swiss—created in 1960s Ohio with whole milk for a milder flavor—and lacy Swiss, made with low-fat milk for a lighter option.

Spain

Spain’s diverse cheesemaking heritage includes many distinctive regional specialties. The Murciana goat of southeastern Spain produces milk used in Garrotxa and other cheeses. This Catalan specialty, once nearly extinct, was revived in the 1980s.

In the Basque Country, which spans northern Spain and southern France, cheesemaking centers on native sheep breeds like the Latxa, protected under the region’s Denomination of Origin (DOP). This DOP covers areas like Biscay and towns such as Gorbea, known for their traditional methods. In Biscay, Carranzana sheep contribute their own distinct qualities. Idiazabal, the region’s most famous cheese, has drawn controversy for incorporating hybrid Assaf sheep, which traditionalists argue violate DOP standards. Ossau-Iraty, another uncooked DOP cheese, also hails from the region. Basque traditions have inspired international products like Lactalis’s “p’tit” cheese, launched in 1987.

Manchego: Manchego, from La Mancha, accounts for nearly 60% of Spain’s cheese production. Made solely from sheep’s milk, it features a wheat head design on aged wheels. Unlike Queso Iberico, which blends milks, Manchego’s purity and global popularity have made it an iconic export—sometimes bearing Don Quixote on foreign-made versions.

Greece & Cyprus

Feta: Feta is one of the world’s oldest preserved cheeses, with references to cheese in brine dating to the 2nd century. By the 11th century, it was known as *prosphatos*. Its modern name comes from the Italian word for “slice,” referencing how it's served in blocks. Authentic feta is made from sheep’s milk or a blend of sheep and goat’s milk—never cow’s milk. It features in Greek dishes like *tyropita*, *spanakopita*, and Greek salad.

Halloumi: Halloumi, from Cyprus, is a semi-hard cheese that doesn’t melt when heated, ideal for grilling or frying. Its heat resistance comes from poaching curds in whey after pressing. Halloumi is the second-most popular cheese for *saganaki*, after feta. Often garnished with spearmint, it has a mild, salty flavor. It holds PDO status in the EU, meaning only halloumi made in Cyprus using traditional methods can bear the name.

United Kingdom

British cheese culture has a long history, with prominent figures often voicing support for native cheeses. Liz Truss, Britain’s shortest-serving Prime Minister at 50 days in 2022, became linked to cheese after declaring in a 2014 Conservative Party Conference speech: “We import two thirds of our cheese. That is a disgrace.” She later admitted to secretly replacing cheese she

had dropped in front of Queen Elizabeth II at Balmoral. Truss lost her Norfolk seat to Labour's Terry Jeremy in the 2024 landslide and was succeeded by Rishi Sunak. George Orwell, in his essay *In Defence of English Cooking*, praised Wensleydale as nearly the world's best cheese. In *The Road to Wigan Pier*, he noted a shift in working-class diets toward foil-wrapped cheeses and blended butter. His novel *1984* used food—including "a cube of cheese"—to reflect life under totalitarianism.

Chef Marco Pierre White, the youngest to earn three Michelin stars and mentor to Gordon Ramsay, elevated cheese in fine dining. In *White Heat*, he advocated incorporating cheese into purées and béchamel sauces, as in his signature macaroni gratin with cream and double Gloucester. At Harveys, he championed British artisanal cheeses.



Stilton: Though named after a Cambridgeshire village, Stilton's DOP status bars production there. Made only from cow's milk, Stilton comes in two varieties: white, with a creamy texture, and blue, inoculated with *Penicillium roqueforti* to produce its signature veining and stronger flavor. Daniel Defoe dubbed it "our English Parmesan" in 1724, and Orwell later called it "the best cheese of its type in the world."

Cheddar: Originating in Somerset's village of Cheddar, this cheese gained early renown for its flavor and shelf life; in 1170, Henry II bought over 10,000 pounds at a farthing per pound. Cheddar's global spread began when Jesse Williams opened America's first cheese factory in 1851 in Rome, New York. Mass production was revolutionized in 1916 by James Lewis Kraft, who developed pasteurization techniques for packaged cheddar.

<u>Low Countries (Belgium, Netherlands, Luxembourg)</u>

Limburger: Limburger is a soft, white cheese known for its strong aroma. Originating in the former Duchy of Limburg, it has inspired scientific studies and pop culture alike. Researchers found that mosquitos are as drawn to Limburger as to human feet, earning the study an Ig Nobel Prize. The B-52s referenced its smell in "Dance This Mess Around." In Belgium, traditional Limburger is protected under the name *Fromage de Herve*. German immigrants brought it to the American Midwest, where it's typically served on sandwiches with mustard.

Gouda: Gouda is named after the South Holland city where it rose to prominence during the Dutch Golden Age, when the city held exclusive cheese market rights. Traders negotiated prices

using the *handjeklap* handshake system before weighing cheese in a 1668 building by Pieter Post. Often mistaken for Edam, Gouda is marked by its red wax rind that preserves moisture during aging and is sometimes smoked for added flavor.

Norway

Norway's cheese tradition dates back centuries to milkmaid Anne Hov, who created a signature cheese in the Gudbrandsdalen valley. Today, the industry is led by Tine, which produces Heidal cheeses and launched Snøfrisk during the 1994 Winter Olympics. Traditional cheeses like Gamalost, meaning "old cheese," were prized for their shelf stability and stored with stockfish during long winters. Norway is now known for unique cheeses like Jarlsberg, with its holes and sweet, nutty flavor, and brunost, or "brown cheese," a caramel-colored, sweet cheese beloved across Scandinavia.

North America

Mexico

Oaxaca (Quesillo): Oaxaca cheese, or quesillo, blends Old and New World traditions, originating when Dominican friars brought the Italian pasta filata technique to Mexico's Etla Valley in the 1500s. This white, stringy cheese became central to Zapotec cuisine, featuring in dishes like quesadillas and tlayudas. Today, traditional production is threatened by industrial mozzarella-style methods.

United States

American cheese culture reflects the nation's multicultural heritage and innovation. The modern mozzarella stick emerged in the 1970s, enabled by mass-produced dairy, with regional variations like raspberry sauce in New York's Capital District. Other cheese-based dishes were popularized or created in the U.S., such as Detroit-style pizza using brick cheese and Chicago's deep-dish with stuffed cheese crust. The Philadelphia cheesesteak, invented by the Olivieri brothers, includes thinly sliced steak, melted cheese (often Cheez Whiz), and a hoagie roll; Pat's and Geno's are iconic rivals. The cheeseburger, a cultural symbol, inspired The Economist's Big Mac index (since 1986) and Jimmy Buffett's 1978 song, later leading to a restaurant chain and internet memes like "I Can Has Cheezburger?" Regional variants include Minnesota's Jucy Lucy (cheese inside the patty) and the Patty Melt (cheeseburger grilled cheese hybrid).



American cheeses include Wisconsin brick and California's Monterey Jack. Cypress Grove's Humboldt Fog goat cheese earned international acclaim. Government cheese, a processed product, originated in WWII wartime food management and peaked in 1981 with the Agriculture and Food Act distributing 560 million pounds through nonprofits. Cream cheese owes its mass production to a Chester, NY mayor who improved dairy processing; it's central to carrot cake (possibly tracing to medieval sugar substitutes) and appears in crab Rangoon. The Philadelphia brand, founded in 1880, is named but not based in Philadelphia.

Kraft Singles, introduced in 1950, pioneered individually wrapped processed cheese slices, with evolving regulatory classifications—from "Pasteurized Process Cheese" to "Pasteurized Prepared Cheese Product" due to recipe and fat content changes. Kraft-Heinz's orange cheese faced scrutiny over misleading calcium content ads.

Missouri has a distinctive cheese culture: Ruma's Deli's open-faced Gerber sandwich and Imo's Pizza are regional staples; St. Louis is famous for toasted ravioli at Busch Stadium and provel cheese in St. Louis-style pizza. Wisconsin, known as "America's Dairyland," leads U.S. cheese production and created Colby Jack in 1885 by blending Colby with Monterey Jack. In 1995, a man survived a plane crash by using a Green Bay Packers foam cheese wedge hat ("Cheesehead") as protection.

Sister Noella Marcellino, “The Cheese Nun,” is an American microbiologist with a PhD from the University of Connecticut. She earned a Fulbright to study French fungi relevant to cheesemaking. A Benedictine, she applied traditional aging methods at Hartford’s Abbey of Regina Laudis and demonstrated wooden barrel aging in Netflix’s 2016 series *Cooked*, in the episode on earth and food.

Canada

Canada’s cheese-making began around 1610, initially following French styles before expanding through diverse influences to include unique varieties like Pikauba and Bleu Benedictin. The famous monastic cheese Oka was made by Trappist monks until 1981, when the recipe was sold to Agropur. Canada’s greatest cheese contribution is fresh cheese curds, the base of poutine—fries topped with curds and gravy—originating in Quebec. Cheese production today centers mainly in Quebec and Ontario.

Poutine, Quebec’s iconic dish, has debated origins with Le Café Idéal in Warwick and Le Roy Jucep in Drummondville both claiming creation. Its simple formula of crispy fries, fresh curds, and gravy has made it a staple locally and beyond. Famous spots like Ashton fast food and La Banquise in Montreal are known for perfecting it. When St. Louis Blues’ Joel Edmundson ate poutine from the Stanley Cup, it highlighted the dish’s role in Canadian sports culture. Poutine’s presence at a Trudeau-Obama state dinner showcased Quebec’s contribution to Canada’s culinary identity internationally.

Asia

India

Paneer is the Indian subcontinent’s most popular cheese, integral to many regional cuisines. Its origins blend influences from South and Central Asia, with some crediting 16th-century Afghan and Persian nobles, and others pointing to 17th-century Portuguese contributions refining curdling techniques for chhena, the fresh curd forming paneer’s base. Folklore also links paneer to Mughal royal kitchens, used in shahi and korma dishes. Unlike many Western cheeses, paneer is fresh, unaged, mild, firm, and holds its shape when grilled, fried, or simmered in curries.

Iran

Iran has one of the world’s oldest, most diverse cheese traditions. Aroushe, made by Sangesar nomads, dates back over 3,000 years. Iran’s cheese heritage ranges from ancient regional varieties like Lighvan in Azerbaijan province to modern Western-style parmesan- and edam-like cheeses from Tabriz. Preserved dairy products like kashk (dried whey) are used in Persian stews. Today, cheeses such as panir remain widely enjoyed.

Georgia

The Tushetians of Georgia’s mountains historically exported Guda cheese and wool. Georgian cheese specialties include Tenili, a fermented string cheese from Meskheti aged in veal stomachs, and Sulguni, a popular pickled cheese during the Soviet era alongside Ossetian

cheese. Georgia is internationally known for khachapuri, cheese-filled bread often topped with egg, symbolizing Georgian cuisine.

Tibet

Tibet's high plateau fosters a distinctive dairy culture dating back millennia, as shown by archaeological and dental evidence at Gelintang. Tibetan cheesemakers produce chura kampo from leftover curds after boiling buttermilk. Chhurpi, Tibet's famous hard cheese, endures harsh high-altitude conditions. Dairy centers on yak and female dri, whose rich milk is used in dishes like Thue cake served at festivals such as Sho Dun and Losar New Year.

Cheese in Popular Culture

Turophiles: Turophilia, from the Greek word for "cheese," is a passion combining scientific study and sensory appreciation. Enthusiasts engage in vertical tastings comparing raw versus pasteurized milk cheeses and debate Penicillium roqueforti versus Penicillium glaucum cultures. Places like Neil's Yard Dairy host these cheese lovers, who analyze differences between Alpine and washed-rind varieties and explore factors influencing artisanal cheese flavor, texture, and aroma.

Cooper's Hill Cheese-Rolling: This annual English event involves chasing a wheel of Double Gloucester cheese down Cooper's Hill on Spring Bank Holiday. Possibly rooted in pagan harvest rituals, the race is dangerous; Chris Anderson has won 23 times. Tradition includes a master of ceremonies spreading biscuits at the start. For safety, the real cheese was replaced with a foam replica in 2013.



John Stockdale of Webster's Dairy, Saxelbye, starting the traditional Easter Stilton cheese rolling contest, March 1964, the year in which it was revived by the landlords of The Talbot and The Bell. This annual contest takes place on the main street of Stilton. Today it is normally run in May and is organized by the Stilton Community Association.

Wallace and Gromit: The British animated series features Wallace, an inventor obsessed with cheese, and his dog Gromit. Created by Nick Park, it began with a short about Wallace's cheese moon expedition and continued through films like "A Close Shave." The show boosted real-world cheese interest, leading to a partnership with Wensleydale Creamery in Hawes after Wallace praised their cheese.

Chuck E. Cheese: Founded in 1977 in San Jose by Nolan Bushnell, creator of Atari, Chuck E. Cheese was inspired by Disney's Enchanted Tiki Room. Featuring an anthropomorphic mouse mascot, it had ties to ShowBiz Pizza Place and was later owned by Queso Holdings under Apollo Global Management. During COVID-19, it launched delivery pizzas via the ghost kitchen Pasqually's Pizza & Wings.

Green Cheese: "Green cheese" refers to young, unripened cheese. The Oxford English Dictionary traces the term back to 1542 describing fresh cheeses. John Haywood's 1546 proverbs popularized the phrase "the moon is made of green cheese" to mock gullibility, originally highlighting the absurdity of believing falsehoods.

Notable Cheese Companies & Brands

Groupe Lactalis: Lactalis, the world's largest dairy producer, is a French company founded by the grandfather of current CEO Emmanuel Besnier. Besnier is France's richest non-fashion billionaire. Lactalis owns major brands including Siggi's Dairy, Kraft Natural Cheese, and Parmalat, competing with giants like Danone. In 2021, the U.S. Department of Justice forced Lactalis to divest Athenos and Polly-O brands due to regulatory concerns.

Culver's: Starting as a small restaurant in Sauk City, Wisconsin, Culver's became known for ButterBurgers, cheese curds, and frozen custard. In 2018, it introduced Goldie, a mascot for its fried cheese curds. Wisconsin Governor Tony Evers declared July 18th a ceremonial day for Culver's. Their April Fool's "CurderBurger," made entirely of cheese curds, sold out at the Madison location.

Lunchly: Lunchly, a pre-packaged meal kit brand, was founded by content creators KSI, Logan Paul, and MrBeast as a healthier alternative to traditional lunch options like Kraft Heinz's. It features products such as Feastables chocolate bars, Prime drinks, and signature queso cheese. Its lineup includes options like "The Pizza," designed as a complete portable meal.