"Everyone has gone daft over [the] food cereal business," according to an Illinois reporter who visited Battle Creek, Michigan, in June 1902.

A few months later the local *Daily Moon* newspaper observed that, "Today Battle Creek is more like a boom town in the oil region than a staid respectable milling center. There are over thirty large [cereal] establishments, some of them running day and night, and all turning out hygienic foods. The population has increased by leaps and bounds and land values have risen enormously."
From 1901 to 1905 Battle Creek was in the grip of a “cereal boom.” Strangers poured into the town of 25,000 inhabitants at such a rate that there were more than 1500 houses under construction at one time.

Before the boom

Even before the boom began, Battle Creek was home to more than 100 manufacturing establishments. It was the fastest growing industrial center in Michigan, where workers were paid the highest hourly wages in the state. An energetic laborer in the “Queen City” could earn almost $600 a year for working a 10 hour day, 6 days a week.

Located at the intersection of several major rail lines, Battle Creek supplied the world with agricultural machinery, industrial steam pumps, newspaper printing presses and publications from the “largest printing establishment between Buffalo and Chicago.”
But it was not any of these industries which made Battle Creek known around the world as the "Health City."

In 1866 Seventh-day Adventist founders James and Ellen White opened the Western Health Reform Institute on Battle Creek’s west side. Ten years later the young Dr. John Harvey Kellogg became director. Over the next 25 years he built the "Battle Creek Sanitarium" into an institution recognized around the world for its "health building and training" regimen of hydrotherapy, exercise and vegetarian diet. The San's experimental kitchen developed cereal-based coffee substitute beverages as well as granulated and flaked ready-to-eat cereal products.

In 1891 C. W. Post came to the San to seek a cure for his chronic illness. Although he did not find his cure there, he did find the key to his fortune. Intrigued by the marketing potential of Caramel Cereal Coffee, which he had tasted at the San, Post developed his own version. Postum, made from wheat, bran and molasses, was introduced in 1895. Three years later Grape-Nuts cereal, patterned after the San's granola, appeared on the market. Both products were energetically and skillfully marketed and made Post a millionaire in less than five years.

In this era described by Theodore Roosevelt as a "riot of individualistic materialism," inventors and investors willing to take a risk could accumulate quick fortunes. C. W. Post's meteoric rise did not go unnoticed by speculators eager to strike it rich themselves.
They converged on Battle Creek hoping to capitalize on the city's renown as the Health City as well as on the skilled work force which already knew the secrets of making the "healthy" cereal products.

Looking for trained workers

Dr. Kellogg warned the public that the reputation of the Sanitarium "proved an irresistible temptation to men possessed of worldly cunning and shrewdness who have not scrupled to avail themselves of the confidence reposed by the public in the Battle Creek Sanitarium. ... By locating factories [here] ... [they] have boldly sought to appropriate to themselves a reputation and public confidence which they have not earned."

Chemists, engineers, even janitors, who worked in the Sanitarium food factories were in demand because they alone could supply manufacturing expertise for the new companies. Dr. Kellogg tried to discourage speculators from "poaching" among his employees. Workers at his Sanitas Nut Food factory were required to sign a pledge that they would "under no circumstances whatever, ... use such knowledge and information so acquired [at work] for the purpose of engaging myself, or aiding or assisting ...any other person or persons, association or corporation, or combination of individuals ...in engaging in any business enterprise of any kind or nature whatever, which could in the slightest degree ... come into competition with the Sanitas Nut Food Co., Limited, or will I under any pretext whatever impart such knowledge and information to any other person or persons whomsoever."
Despite these agreements, there were defections. Jesse Bourdeau, an Adventist originally from Vermont, was in charge of the Sanitarium canning factory in the 1890s. In January 1901 he left to become one of the incorporates of the Malta-Vita Company. Six months later he sold his interests in that company and went to Ann Arbor to form the Eata-Malta Company. Before he left town he sold his cereal formulas to the Cero-Fruto, Korn Krisp and Malted Food companies.

His Ann Arbor partner immediately filed suit against Bourdeau, alleging that he had promised to devote his “entire time, skill and attention for three years” to Eata-Malta. The suit was dismissed but Bourdeau soon returned to Battle Creek to found the Bourdeau Food Company, manufacturing Boston Brown Flakes and Bourdeau Flakes from 1902 to 1904. His brother also organized a firm in New Haven, Connecticut, producing Yankee Crisp flakes, based on Jesse’s formulas. Bourdeau himself moved on to Detroit where he incorporated the National Food Company in 1905.

**Competition and price wars**

By 1902 Battle Creek was home to more than 40 companies manufacturing flaked or granulated cereal products made from wheat, corn or oats. Enticing investors with creative names like Zest, Vim, Flak-ota, Corn-O-Plenty, Korn Krisp, Malt-Too, X-Cel-O and Per-Fo, each speculator touted his product as the “perfect food.”
Unfettered by regulation or the necessity of proving advertising claims, the companies were free to claim exaggerated health benefits for their products. Flak-Ota was touted as "a perfect food in health and sickness ... a teacup full is equal to a pound of the best beefsteak."

Or, if you ate Malta-Vita, "you [would] go forth to your labors and pleasures buoyant and vigorous" because the malt-flavored wheat flake "enriches the blood and clears the brain and aids the various constituents of the body in performing their tasks."

Competition between the companies was not limited to a battle of advertising slogans. In 1903 the Force Food Company of Buffalo, New York, and Malta-Vita of Battle Creek engaged in a "merry war" of 10 cent packages. While most cereal packages were selling for 15 cents each, Malta Vita introduced "Vim" in 10 cent boxes. Force immediately responded by producing "Vigor" flakes at the same low retail price. They tried to undercut Malta-Vita by lowering their wholesale price to 36 packages for $2.00. As the local newspaper pointed out, "This warfare is not conducive to large profits and ... it would seem that [both concerns] must soon take a tumble to the fact that they are gaining nothing but demoralizing the breakfast food market."

Though the consumers were presumably enjoying the price battle, both companies were soon forced to face economic reality. Within a few months customers were paying the "pre-war" price of 15 cents a package.
In addition to their health-giving properties, some of the cereals were further improved with exotic flavorings. Apple jelly was sprayed on Cero-Fruto wheat flakes, maple syrup enhanced Mapl-Flakes, wheat flakes impregnated with cocoa became CocoCream Flakes and malt flavoring was added to Korn Krisp. Celery and pepsin combined to make Try-a-bita flakes a taste sensation.

Companies were capitalized from $5,000 to $5,000,000, with as little as 10% of the total actually on hand in advance of production. Local newspapers reported that "the whole population has pulled all its loose cash together" and sank it into the new enterprises. By May 1902 there were "very few people ... in this city who have not taken stock in one or more of these breakfast concerns," according to the *Daily Moon* newspaper.

**Production problems**

However, many of the companies which took money from these eager investors and filed Articles of Incorporation never progressed beyond issuing elaborately decorated, but financially worthless, stock certificates.
Several of the early companies which did make it into production had problems with the quality and shelf life of their products. The original formula used by the Korn Krisp Company left too much oil in the corn flakes which spoiled before they could reach the consumer. Frumenta Flakes, made by the same company, were so brittle that the sharp edges cut the mouths of unwary purchasers.

The Norka Food Company made an extruded product of oats, sugar and salt. After the oats were steamed and tempered, they were pushed through a perforated disc into a meat chopper. The resulting "crumbles" were baked and packed. According to food chemist John Lippen, the "irregular pieces 1/8 inch thick and 1/4 to 3/4 inches long, [were] … a mottled grey and white color. The flavor was bland and a trifle sweet. It had no appeal to the eye or tongue." The first batches of these malted oats also went rancid soon after production.

**Production successes**

Some of the companies were more successful in their production methods, developing products which were both stable and tasty. Mapl-Flakes, made by the Hygienic Food Company, were sweetened with Vermont maple syrup. To allow the flavoring to penetrate the grain, it was necessary to rupture the hard outer coat of the bran. After the wheat was cooked in water until the bran burst, syrup and salt were added and cooking continued. According to Lippen, the mushy grain was dumped into "shallow vats where men in rubber boots tore the lumps apart with rakes and forks." The granules were then dried, flaked and baked.
The original methods for flaking the cooked grain were also rather crude. Dr. Kellogg used 8 inch flour mill rolls, cooled with chunks of ice. At first the rolls were fed by hand and the flakes were scraped off the rolls with attached paper knives. By 1905 the Lauhoff flaking mill, first developed by a Detroit firm for crushing tobacco stems, was adopted for processing corn flakes.

After cooking and flaking the grain, many of the cereal companies used a similar baking process. The flakes were spread on a four foot wide conveyor belt, patterned after the type used to dry metallic ore in mining operations. The cereal was baked to a golden brown as it traveled down eleven levels through the 30 foot high brick oven.

Related industries

This "Johnson traveling oven" was patented by Adolph Johnson of the Johnson Foundry and Machine Works, who also developed rotary steam cookers and a grain hulling machine. Harry Johnson developed a "conveyor for carton-sealing machines" still known throughout the industry as the "Johnson machine." Several other local companies, including Shouldice Brothers and the Flour and Cereal Milling Machinery Company, were also organized to serve the specialized needs of the cereal industry.
The Cereal Boom in Battle Creek

All the new cereal companies needed supplies, especially paper packaging. Both the Post and Kellogg companies established their own paper factories. In addition, the independent Record Printing and Box Company manufactured cereal cartons for companies in Battle Creek and around the country.

A host of other related businesses sprang up in town in the early years of the century. Firms making other "healthy" products took advantage of Battle Creek's name, including coffee substitutes and even a "health beer," made from only the "cleanest hops and purest malt."

Civic pride

Citizens of Battle Creek were proud of their new industries and the fame they were bringing to the city. The 1902 Labor Day parade was the "largest celebration in the history of the city." More than 25,000 "strangers" flocked to the city to watch "3,000 to 4,000 men and women" pass in review for over an hour. The largest delegation among the 70 companies sponsoring floats and marching delegations were the 12 wagons from the Malt-Too Flake Food Company. The "monster parade" was followed by a Pure Food Banquet which offered free samples of "the products which have helped make Battle Creek famous."
During 1902, local charitable organizations found ways to capitalize on the city's fascination with the burgeoning cereal industry. The Royal Templars gave a "Health Food Social" in May to give "those who attended an idea of the magnitude of the industry." In March the Ladies Aid Society of the Independent Congregational Church sponsored a "Sample Sale" for which more than 60 local manufacturers donated health foods and other products. In the same month the Sick Benefit Association of the Advance Thresher Company presented a "Grand Ball" where booths sold "cereal foods" to raise money for the cause. In addition to the usual waltzes, the evening included a "pure food three step" and the "cereal beverage quadrille."

Many of the cereal companies established during the boom years never went into production. The majority of those who actually manufactured cereal quickly went bankrupt because of inadequate financing, poor production methods or an inferior product.

Malta-Vita Food Company

One of the few companies which survived more than a decade was the Malta-Vita Food Company. Originally organized in 1900 as the Battle Creek Pure Food Company, the corporate name was changed in 1903. A "handsome three story structure" was built on Angell Street, "fitted up in the most approved style for the manufacture of food." An elaborate advertising campaign was developed by a New York firm, which designated Chicago as "the first city to be attacked."
There were initial problems when the equipment proved inadequate to meet the growing demand for the product. According to John Lippen, "they resorted to improvised methods. They spread the cooked wheat on floors and men in rubber boots shoveled the wet wheat over and over until dusty mold filled the room as the product slowly dried. The workmen said, 'they will take it,' but the consumer said, 'no.' ... Their wheat flakes did not go rancid but they became moldy on account of the method of drying the cooked grain." As the production machinery was improved, the quality of the Malta Vita wheat flakes improved. Sales increased and within a year two additional factory buildings were constructed.

Despite the passage of the Sherman Anti-Trust Act in 1890, the practice of creating national supercorporations to control a single industry was still flourishing. During 1902 rumors swirled around town about the formation of a national cereal trust.

In August 1902, when Malta Vita officers were queried about a $250,000 "big deal," they denied that any "trust was in view." As the local newspaper reported, with pardonable civic pride, "a food company trust without at least taking in several of the largest companies of this city, the food center of the world, would not be much of a trust."

No food company trust was actually established and competition continued unabated. Malta Vita's cereals -- Vim, Power, Malta Vita Flakes -- continued to be among the most successful of the myriad offered on the market. Soon the company employed several hundred workers who turned out 50 to 75 tons of the "finished product" daily.
F. L. McConnell, one of the company representatives in Philadelphia, developed a novel method of marketing using the "cereal supper scheme." "Mr. McConnell and his corps of assistants have certainly been busy," the paper reported in June 1903. "In the past month they have given a number of suppers at leading churches, Malta Vita figuring largely, of course, on the menu. At these church suppers immense crowds of people have been in attendance and, of course, the merits of the food were thoroughly explained." Apparently the idea was successful for McConnell reported that sales increased by 200%.

When the cereal boom ended, Malta Vita was one of the companies threatened with bankruptcy. In January 1905 company stock, which had once "soared" to $1.70 a share, was offered at "2 cents on the dollar." Directors H. N. Higginbotham of Marshall Field and Company in Chicago and C. M. Studebaker of South Bend worked through a Chicago bank and a Detroit lawyer to devise an ingenious scheme to avoid the "complications of receivership."

They formed the Sterling Food Company to purchase all the Malta Vita stock, assets and mortgages. Within two weeks a reorganized Malta Vita Pure Food Company emerged after "an exchange of stock and otherwise" with the short-lived Sterling Food Company.

The reinvigorated Malta Vita Company continued in business until 1912, when it was finally forced into receivership. The assets were purchased by the Studebaker interests in South Bend and plans were announced to use the factory as "a storeroom and warehouse for the large Studebaker automobile and buggy concern." However, within a few months the former cereal factory buildings were purchased by the neighboring Rumely Company, an agricultural machinery manufacturing company, and one of the city's oldest businesses.
Ralston Foods Company

Ralston Foods Company is the only existing Battle Creek cereal company which can trace its lineage back to the height of the cereal boom through a series of name changes and buyouts.

The Battle Creek Cereal Food Company was incorporated on July 23, 1901. The original McCamly Street factory was located on the southern edge of the downtown business and manufacturing district, between the Michigan Central, Grand Trunk and Cincinnati Northern railroad lines. To cook the wheat flakes, the building contained a "gigantic oven, three stories high and 35 feet long." The engine room had to be built around the 350 horsepower Corliss coal engine with its 14 foot flywheel, weighing 20,000 pounds. Proprietors proudly explained that the "grain will not be handled at all in passing from the raw state to the finished product except by machinery. It goes in to the top of the building and is carried down by gravity and various conveyors to the bottom floor where it is packed into boxes, ready for shipment."

Before construction on the five-story factory building could be completed in 1901, the company name was changed first to Cero-Vito and then to the Cero-Fruto Company. The wheat flake sprayed with apple jelly was developed by John Linihan, city alderman and proprietor of a downtown drug store, who had once worked at the Sanitarium. His concoction sold well and the company was "one of the most prosperous concerns of its kind" in the city. Early in 1903 the plant facilities were doubled and Cero-Fruto was recapitalized as a New Jersey firm for $2,500,000. The newspaper reported that "a number of Battle Creek people, as well as others, cleaned up good money as a result of the transaction."
Later that year Linihan left town to assume a position as general manager and treasurer of the Egg-O-See Food Company of Quincy, Illinois. When Cero-Fruto was placed in receivership in 1905, Linihan returned to his hometown and purchased the factory as a branch of his Illinois concern.

The Hygienic Food Company was originally established on the east side of town. Their Mapl-Flakes were so popular that they needed to expand production facilities and they purchased the old Cero-Fruto plant in 1906. Eight years later the company was reorganized and the corporate name was changed to Mapl-Flake Mills.

In 1917 the "largest grain concern in the world," Armour Grain Company of Chicago, acquired the McCamly Street cereal plant for $300,000. They pledged to enlarge the factory complex and to continue to produce corn and wheat flakes in the buildings. Armour also constructed a macaroni plant on the 5 1/2 acres adjacent to the old factory. However the macaroni sales were disappointing and the product was discontinued in 1922.

A few years later Armour was forced to liquidate some of its holdings, including the Battle Creek plant, due to financial losses incurred after losing its seat on the Chicago Board of Trade.

The final transfer of ownership took place in 1927 when Ralston Purina Company of St. Louis bought the former Battle Creek Cereal Food, Cero-Fruto, Hygienic, Mapl-Flake, Armour plant for $2,000,000.
The original factory building was still used for corporate offices and the production of Mapl-Flakes until it was destroyed by fire in 1928. It is interesting to note that, in this extremely competitive industry, Postum Cereal Company allowed Ralston to use some of its idle flaking equipment so that production of Mapl-Flakes could continue uninterrupted. For two weeks, until Ralston could resume production, the wheat flakes were manufactured in the Post plant on the east side of town and trucked over to the McCamly Street site to be packaged.

Ralston continued to produce Mapl-Flakes until 1929 when the name was changed to Ralston Wheat Flakes, which were produced intermittently in the Battle Creek plant until 1950.

While corn flakes were the major product of the local plant, Ralston also manufactured rice and bran flakes, Buddies (WWII field rations), puffed wheat as well as dog and cat chow. In 1935 the first experimental production of Shredded Ralston, a bite-sized shredded wheat biscuit, began in the Battle Creek plant. After a Shredded Rice cereal was added in 1950, the product name was changed to the more "catchy" Chex trademark a year later. Corn Chex were added to the popular product line in 1959.

Battle Creek Toasted Corn Flake Company
The last of the continuing Battle Creek cereal companies is the nation's largest breakfast food manufacturer. Will Keith Kellogg was the younger brother of Dr. John Harvey Kellogg, the director of the Battle Creek Sanitarium. Beginning in 1880, W. K. was employed at the Sanitarium in a variety of roles, including bookkeeper and plant manager. In 1899 he was named general manager of the Sanitas Nut Food Company which manufactured the cereal and granola products developed in the San's experimental kitchens.

Chafing under his brother's supervision, W. K. planned to leave the San and create his own cereal company, producing a flaked corn cereal. Only a few months later the 1902 fire destroyed the Sanitarium building. Realizing that rebuilding the institution, to which he had devoted more than twenty years of his life, would require a massive effort, W. K. volunteered to return and help his brother. Two and a half years later, at age 46, W. K. Kellogg was finally able to follow his dream of creating his own company.

In 1906 he established the Battle Creek Toasted Corn Flake Company across town from the Sanitarium, near the rapidly growing Postum Cereal Company. By this time the cereal boom had essentially collapsed, leaving barely a dozen cereal companies still existing in the "cereal city."

Despite a nation-wide business depression in 1907 and fierce competition in a shrinking industry, Kellogg made a success of his new enterprise through an aggressive and innovative national advertising campaign. Within five years the younger Kellogg brother was a multimillionaire and his company was on the road to becoming the industry leader.
On September 7, 1902, the *New York World* printed an eight-page special section on “Battle Creek, Queen City Michigan.” The newspaper examined the “Remarkable Progress of the New Idea of Cereal Breakfast Foods” and the city’s “Sudden Prominence as a Great Industrial Center…Commanding the Attention of the World.”

According to the article, over a million one-pound boxes of cereal were produced each day in the “greatest cereal food producing city in the world.” Reflecting the economic optimism of the period, the *World* reported that “Manufacturers Are Becoming Millionaires by Leaps and Bounds.”

Not all cereal manufacturers were that lucky, but there is no doubt that in the first decade of the 20th century Battle Creek was “food crazy.”

“Every man, woman and child is a stockholder in a Food company or wants to be,” wrote Chicago advertising executive A. J. Wilson in 1902. “Bankers are Food Company promoters. Preachers turn chemists and found Food companies.”
Boys play and organizing companies. Girls dream about marrying Food magnates. Children cry for Battle Creek cereals.”

The “Belle of Battle Creek”

The New York World captured the spirit of the health food craze in this verse which accompanied a drawing of a farm girl carrying a sickle and a sheaf of grain.

Behold the belle of Battle Creek

Plump of form and pink of cheek,

It causes comment everywhere.

Her beauty is a type so rare

She needs no powder for her face,
She needs no stays to give her grace;

Her days with happiness are rife,

The secret of her health and life

Is Pure Food.