

# FOODPRINT TIMELINE (in English)

**1830 – 1840**

## Invention/historic event

1800-1850 Thanks to numerous developments in the field of infrastructure in the first half of the 19<sup>th</sup> century, more and more people can be provided with a varied supply of (fresh) foodstuffs. Fresh milk can be quickly carted into the cities, for example.

1830 The Royal Netherlands East Indies Army captures the entire island of Java. The island is now definitely part of the Dutch colonial empire. In part thanks to yields from the colonies (the 'fruit of the East Indies'), the Netherlands is able to construct a railway network with railway bridges in the home country.

1830 First handwritten recipe of the croquette in the Netherlands. The recipe is currently owned by collector Johannes van Dam. {origineel manuscript plus een 19<sup>de</sup> eeuwse kookboek / dient afgeschermd te zijn van vette vingers}

1830 Flavoured soda water becomes popular in the United States: the birth of the soft drink.

1832 In the early 1830s, the international cholera epidemic reaches the Netherlands. People contract the disease by drinking infected drinking water. A medical publication from this time notes about a certain Jacoba Janssen: 'Na onmatig gebruik van komkommers en mosselen, zij pijn in het lijf (gevoelt), gepaard met misselijkheid, braking en veelvuldige stoelgang, welke eindelijk zodanig toeneemt, dat er niets anders dan vlokkig water onophoudelijk ontlast wordt.' ('After excessive consumption of cucumbers and mussels, she (felt) pain in her torso, accompanied by nausea, vomiting and recurrent bowel movements, which eventually increase to such a frequency, that nothing but flocky water is constantly excreted.')

1836 The German chemist invents artificial fertiliser. He manufactures it from natural deposits of sea bird and bat droppings.

1837 John Deere perfects the steel plough.

## Art

1836 In his painting 'The Oxbow', landscape artist Thomas Cole portrays how cultivation affects and destroys the American wilderness.

## Architecture, urban development and landscape architecture

1830 The Liverpool and Manchester Railway is constructed for the transportation of goods from the industrial areas of Manchester to the port of Liverpool. It is the first railway line that is also used to transport people.

1837 Building of the first municipal slaughterhouses. These abattoirs are constructed outside the city centre. The slaughter of cattle is done according to hygienic conditions established by the municipality. The first Dutch municipal slaughterhouse is built in Maastricht in 1826.

1838 The Maatschappij tot Nut van het Algemeen (Society for the Common Good), established in Franeker, is the first organisation in the Netherlands to make allotment gardens available to the public.

## Literature, film and music

1830 William Cobbett writes the book 'Rural Rides'. The English journalist, agricultural expert and political reformer does not agree with the reforms suggested by British parliament in the areas of agriculture and cattle breeding. He decides to hit the road to observe the conditions in the countryside for himself.

## 1840 – 1850

### Invention/historic event

1800-1850 At the start of the 19<sup>th</sup> century, people's diet is very limited. It simply consists of bread, potatoes, porridge, some bacon and sausage, cabbage, carrots, turnips, French beans or beans.

1840 The croquette is mentioned for the first time in print in Jacob van Lennep's 'The Adventures of Ferdinand Huyck': 'Maar gij zult mij vragen, wat u dit alles aangaat, en waarom ik u uwen tijd ontroof, door u over de kunstjes van de poes mijner oude vriendin te onderhouden? Ik zal er u openhartig de reden van zeggen: het is mij, uit hetgeen ik zoo dagelijks lees, genoegzaam gebleken, dat het door alle schrijvers van naam en gezag als een vereischte wordt aangemerkt, nimmer terstond plomp weg met de deur in huis te vallen: maar eerst eenige omschrijving en inleiding te bezigen, bestemd om de nieuwsgierigheid te prikkelen en voorts ongeveer dezelfde dienst te doen, welke de pastijtes en croquettes bewijzen wanneer zij het gebrad voorafgaan.' ('But you will ask me, in what way does this concern you, and why I am wasting your time recounting the tricks of my old friend's pussycat to you? I will frankly tell you my reasons for doing so: from what I read from day to day, it has become well enough known to me that it is seen as an essential move by all writers of name and repute to never immediately and bluntly come straight to the point: but to first offer some description and introduction, intended to tickle the reader's curiosity and consequently to provide more or less the same service as is offered by the vol-au-vents and croquettes that precede the roast.').

1846 The English Corn Laws of 1815 and 1846 prescribe import tariffs drawn up to protect the British corn prices against competition from countries with lower tariffs. This legislation is often seen as an example of the British system of mercantilism and can count on opposition among many politicians and farmers in the 19<sup>th</sup> century. The repeal of the laws means the first step towards a free trade system.

1848 The American Ezra Warner invents the can opener.

### Art

1844 William Turner, 'Rain, Steam, and Speed - The Great Western Railway'.

1849 Jean-François Millet, 'The Sower'. Millet's paintings of farmers at work break with a tradition in which farmers merely function as an element in a picturesque or nostalgic tableau. Millet portrays individual men and women in a realistic and at the same time heroic manner.

### Architecture, urban development and landscape architecture

1840 Robert Mills designs the Old Patent Office Building in Washington, D.C., USA, in the Greek Revival style. With the growth of the (food) industry, patents become more and more valuable. The architect was explicitly asked to design a building that was fire-resistant.

1846 With the ongoing industrialisation, warehouses are built in ports everywhere. In 1846, 'The Albert Dock' opens in Liverpool. This complex of warehouses is used for the storage of, among others, brandy, sugar, tobacco and tea. In their design, Jesse Hartley and Philip Hardwick are the first architects in Great Britain to utilise a cast iron and brick construction for a building complex.

### Literature, film and music

1843 Catharine Beecher writes the book 'Treatise on Domestic Economy', in which she emphasises the importance of the woman's role in the domestic environment. The book is a practical and moral guide for housekeeping. Among other things, Beecher provides tips on how to prepare inexpensive and healthy meals.

## 1850 – 1860

### Invention/historic event

1850 The American Joel Houghton invents the first dish washer. It is one of the many inventions that lead to the increasing mechanisation of the household.

1850 Founding of the American Vegetarian Society by (among others) Sylvester Graham, an influential man in the field of dietetics. Graham campaigns against the use of additives that make bread look whiter and more attractive. Such 'clean' bread is extremely popular with the middle class, a group of people who find the dark bread without additives eaten by rural folk abhorrent.

1850 Gold fever reigns in Australia. Some 600,000 migrants leave for the large island. Most migrants eventually find a job in the agricultural sector, leading to a considerable increase in the production and export of agricultural products.

1851 Cities no longer use water pumps. The author Jacob van Lennep establishes the Amsterdam Duinwater-Maatschappij (Dune Water Company) and engages English financiers and engineers to lay the first waterworks in the Netherlands. Van Lennep has a country house in Heemstede and is familiar with the delicious dune water. People should also be able to drink this water in Amsterdam, in his opinion. Waterworks are an important asset in the fight against diseases like cholera and typhoid fever.

1853 Invention of potato crisps by the American George Crum.

1858 A refinery for the production of beet sugar is built in Zevenbergen. There is a strong interest in the products. Fifteen years after the company is established, Zevenbergen has 333 sugar refineries.

### Art

1851 The Pre-Raphaelite William Holman Hunt paints 'The Hireling Shepherd'. The work depicts a romantic image of life in the country.

### Architecture, urban development and landscape architecture

1850 In Germany, a hall system is developed in the middle of the 19th century for the slaughter of animals: a number of slaughtering stands that are alternately used by the butchers are set up under a translucent covering. In the largest slaughterhouses, there are separate halls for each species.

1851 The Crystal Palace is built in Hyde Park in London, after a design by Sir Joseph Paxton, to house the Great Exhibition of 1851. The latest developments in the field of technology can be viewed in the building, which, with its construction of cast iron, wrought iron and glass, is itself seen as a showpiece of modernisation.

1856 The first water tower in the Netherlands is built in Den Helder. As the structures tower over everything else and serve as a landmark for the town, architects are often involved in their design.

### Literature, film and music

1851 Herman Melville writes in 'Moby Dick' about 'The Whale as a Dish': 'In the case of a small sperm whale the brains are accounted a fine dish. The casket of the skull is broken into with an axe, and the two plump, whitish lobes being withdrawn [...], they are then mixed with flour, and cooked into a most delectable mess, in flavour somewhat resembling calves head [...].'

1859 Charles Darwin expounds his evolutionary theory in 'On The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life'. An important factor in the formation of his ideas is his study of finches on the Galapagos Islands. Darwin observes that on the island where only nuts, seeds and other hard foods are to be found, the finches have developed a pointy, hard beak. On islands where a lot of berries grow, the birds on the other hand have broad, blunt beaks.

## 1860 – 1870

### Invention/historic event

1861-1865 In the American Civil War, 11 Southern states with an economy focused on agriculture and a population of 9 million (of which 3 million are slaves) take on 23 states with a combined population of 23 million and an enormous industrial capacity. By 1865, over 600,000 Americans have lost their lives and the Southern states have come under the control of the United States. Slavery is officially abolished.

1862 Louis Pasteur and Claude Bernard conduct the first tests with pasteurisation.

1865 Marie Ana (Granny) Smith from Australia cultivates the first Granny Smith apple.

1866 Establishment of Nestlé. In 2009, Nestlé ranks as the world's largest food manufacturer.

### Art

1863 Edouard Manet, 'The Luncheon on the Grass'. What is more important than the fact that the painting shows a group of people eating is that Manet paints a nude woman in the company of two entirely dressed men. When the work is shown in public, it causes some controversy.

1865 The English painter Ford Madox Brown produces the painting 'Work', which depicts the transition from the rural to the urban society in the English Victorian era. The painting shows labourers digging tunnels so that a water pipeline can be laid.

### Architecture, urban development and landscape architecture

1864 Founding of the Schreber Movement in Leipzig, Germany. This organisation works towards keeping spaces in cities free of development, so that children can develop in a healthy, open environment and in harmony with nature. Supporters of the Movement start with the construction of squares and children's playgrounds, later on, locations are primarily developed as (educational) gardens.

1869 John Augustus Roebling starts building the Brooklyn Bridge. His daughter-in-law, Emily Warren Roebling, finishes the work in 1883. The bridge connects the Manhattan peninsula to Brooklyn and serves as an important infrastructure junction in the provisioning of the constantly expanding city of New York.

1869 The Suez Canal is opened. It is designed by Alois Negrelli, an Austrian engineer.

### Literature, film and music

1860 Using the pen name Multatuli, Eduard Douwes Dekker writes his book 'Max Havelaar: Or the Coffee Auctions of the Dutch Trading Company'.

1866 In 'Alice's Adventures in Wonderland' by Lewis Carroll, Alice ends up in the uncivilised tea party of the Mad Hatter and the Dormouse. Because these gentlemen have argued with Time, it's always teatime here – 6 p.m.

## 1870 – 1880

### Invention/historic event

1870 Globalisation of trade. Trading is increasingly done on an international scale, thanks to industrialisation and the rise of mass production. In England, there is a growing demand for meat to feed the working men. This meat is imported from the Netherlands among other countries. The continent in turn imports increasing volumes of grain from the United States.

1871 The first bananas in the United States are grown after the construction of a railway line to Costa Rica. The 23-year-old industrialist Minor C. Keith decides to plant banana plants on both sides of the track. The crop can subsequently be efficiently transported to different cities in the US.

1871 In Oss, Anton Jurgens opens the first margarine factory in the world.

1871 The first cheese factory in the Netherlands opens its doors in Broek-in-Waterland. However, only English and American cheeses are made at this factory. The agricultural expert A.C.W. Staring is of the opinion that cheese production in the Netherlands should be rapidly modernised: 'De Amerikanen begrepen dat de zo moeilijke bereiding, waarmee onze boerinnen zich dagelijks afsloven, door werktuigen geschieden kan; met grote hoeveelheden tegelijk.' ('The Americans understood that this preparation, which is so complicated and for which our farmer's wives break their backs on a daily basis, can be done using machines; producing large quantities at a time.').

1874 The socially involved liberal Member of Parliament Samuel van Houten introduces a bill aimed at outlawing factory work for children under the age of 12 in the Netherlands.

1875 In Paris, the advertisements on billboards have become a fixture of the urban landscape. The food manufacturing industry in particular turns to this form of advertising.

1875 The early potato and the grape form the main staples of market gardening in the Netherlands. The grapes are primarily dried for the production of raisins.

### Art

1875 In his painting 'The Coalmen', Claude Monet shows the contemporary conditions for coal-porters along the banks of the Seine. The river forms an important artery for the transportation of products from the hinterland to the city.

### Architecture, urban development and landscape architecture

1871-1872 A cast-iron frame forms the basic construction for the Menier Chocolate Factory. Jules Saulnier designs the factory in the French village of Noisiel-sur-Marne. The design of the façade features the letter M and the silhouette of a cocoa tree.

1876 With the rise of mass production, the retailer starts to act as a middleman between the manufacturer and the buyer. In order to sell his wares, the retailer needs a store. Louis Auguste Boileau and Alexandre Gustave Eiffel design the world's first department store: 'Le Bon Marché' in Paris. Here, one can buy clothing, underwear, gloves and hats, but also luxury goods such as chocolate and sweets. The new store also leads to the development of fixed prices.

1877 The shopping gallery is another new building type to grace the city centre, for example the 'Galleria Vittorio Emanuele II' in Milan.

### Literature, film and music

1872 The writer Alexandre Dumas, famous for his novel 'The Three Musketeers', is also a gourmet. He writes the 'Grande Dictionnaire de la cuisine'.

## 1880 – 1890

### Invention/historic event

1880 A long storage life means the product can be transported for longer: for the very first time, a frozen sheep is transported by sea, from Australia to the United States.

1880 The American firm Warren Glass Works requests a patent for the milk bottle.

1882 The Swiss Julius Maggi makes the first stock cube. He has developed the product to provide the poor with an inexpensive means to make a nourishing soup.

1886 Dr. John Stith Pemberton aims to make a medicinal drink against dizzy spells and general malaise and experiments with all manner of herbal extracts in the little kitchen behind his drugstore in Atlanta, Georgia. He sells one of his experiments, syrup mixed with carbonated water, for 5 cents a glass. His friend, the accountant Frank M. Robinson, thinks up the name Coca-Cola and designs the famous logo. The gentlemen sell their interest in the enterprise in 1888 to the businessman Asa G. Chandler for 550 dollars, with the inclusion of the secret recipe.

### Art

1885 Vincent van Gogh, 'The Potato Eaters'.

1888 Vincent van Gogh is very inspired by the 1849 painting 'The Sower' by Jean-François Millet when he paints his version, 'The Sower'.

1889 Albert Bierstadt portrays the American landscape, which is rapidly being transformed by humans. 'The Last of the Buffalo' shows the virtual extinction of the wild American Buffalo.

### Architecture, urban development and landscape architecture

1880 In the United States, more and more cattle breeders venture into the (South)West, toward the Great Plains, a large prairie region in the United States and Canada to the east of the Rocky Mountains. The east is populated by Indians in fixed settlements that sustain themselves with agriculture. In the west, Indian tribes like the Blackfoot and the Sioux hunt for buffalo. Now that the buffalo are close to extinction and the Indians have been banished to reservations, the plains are mainly used to graze herds of cattle. In 1886, the region is affected by draught, storms and overgrazing.

### Literature, film and music

1883 Émile François Zola writes 'The Ladies' Paradise'. The story is set in a Parisian department store.

## 1890 – 1900

### Invention/historic event

1890 In Naaldwijk, the first tomatoes are cultivated as an ornamental plant. The general consensus is namely that the tomato is poisonous.

1893 Invention of the ice cream dessert 'Pêche Melba' by the leading chef George August Escoffier in the Savoy Hotel in London, for the dancer Nellie Melba.

1892 In the United States, the first tractor is invented by Chares Duryea, John Froehlich and the J.I. Chase Company. The unwieldy hulk looks more like a locomotive than a modern-day tractor.

1899 Boston Fruit Company and United Fruit merge, creating the largest banana company in the world. Besides banana plantations, the company owns 11 steam ships and 112 miles of track.

1899 The lung disease tuberculosis is a major hazard to the health of both humans and cattle. Many farmers leave their cows in the stable, because they think that their cattle contract the disease via the outdoor air. At the end of the 19<sup>th</sup> century, it becomes clear that there is a link between the spread of the disease and cow's milk.

### Art

1895-1900 Paul Cézanne, 'Apples and Oranges'.

1897 Paul Gauguin makes the painting 'Where Do We Come From? What Are We? Where Are We Going?' The painting depicts rural life in Tahiti and takes the circle of life as its theme.

### Architecture, urban development and landscape architecture

1898 The Englishman Ebenezer Howard conceives the Garden City. Howard publishes 'Tomorrow: A Peaceful Path to Real Reform'. This book is reprinted in 1902 as 'Garden Cities of To-Morrow'. Howard introduces the utopian urban planning concept of the 'Town-Country Magnet'. The book sets forth plans for cities without slums that combine both the advantages of the city (opportunities, entertainment and higher wages) and of the countryside (beauty, fresh air and low rents).

1899 To develop further his Garden Cities concept, Ebenezer Howard founds the Garden City Association. This subsequently becomes the Garden Cities and Town Planning Association, and finally the Town and Country Planning Association (TCPA). The TCPA is the oldest British urban planning association.

1899 At the end of the 19<sup>th</sup> century, the Dutch landscape has acquired the appearance that is the basis of the landscape valued by today's public and mapped out by cultural historians and landscape architects. In the past fifty years, the country has become dryer and fuller, but agriculture has not yet gone through the future process of rationalisation.

### Literature, film and music

1891 Thomas Hardy writes the novel 'Tess of the d'Urbervilles'. The major changes in Victorian England play an important role in this book, particularly the changing religious insights (among other things as a result of Charles Darwin's publications) and the economic developments that came out of the industrial revolution.

## 1900 – 1910

### Invention/historic event

1900 The Netherlands sees the introduction of the multi-ring gas cooker, so that from now on, the Dutch can make multi-pan meals like the classic meat, vegetables and potatoes.

1900 André Michelin publishes the Michelin Guide, listing French restaurants that one can visit 'en route' with the automobile.

1900 The German firm Weck puts a home preserving set on the market. From now on, the people of the early 20<sup>th</sup> century are able to preserve food for far longer, while it still retains much of its flavour.

1908 The American plant geneticist George Harrison Shull plays an important role in the development of hybrid maize, a crop that will have a major impact on the scaling up and globalisation of agriculture. In 1908, Shull makes a number of groundbreaking discoveries in the field of genetics.

1909 The 'College Park Airport' in Maryland, USA, is seen as the world's oldest fully operational airport. Air transport is responsible for an enormous boost in the globalisation of food production and distribution.

### Art

1906 Eugène Atget regularly photographs street scenes in Paris. Numerous pictures, including 'Rue Saint Jacques', show the abundance of advertising in the city.

1907 Pablo Picasso paints 'The Young Ladies of Avignon', one of the most well-known paintings of the 20<sup>th</sup> century. The work depicts five prostitutes. A bowl of fresh fruit is shown in the foreground.

### Architecture, urban development and landscape architecture

1903 The first garden city in the world, Letchworth Garden City in Hertfordshire in England, is built at the initiative and according to the ideas of Ebenezer Howard. A competition is organised for architects who can give concrete form to the ideals of Ebenezer Howard. The architects Barry Parker and Raymond Unwin win the competition and subsequently design the garden city. The immediate environs of the city are zoned as an area for farming – the world's first planned 'Greenbelt'.

1904 Charles Rennie Mackintosh designs the Glasgow Willow Tearooms for Miss Cranston. Tearooms are a novelty around the turn of the century and offer a welcome change (particularly for women) for the male-dominated pubs and clubs.

### Literature, film and music

1900 'De vis wordt duur betaald' (literally 'The fish comes at an expense'), is an expression that originates in the play 'The Good Hope' by Herman Heijermans. In this play, Heijermans denounces the abuses in the offshore fishing industry. The fisher's wife, the Widow Kniertje, makes the above statement when she hears that her third son has perished at sea.

1906 Upton Sinclair writes 'The Jungle', an extremely critical novel recounting the poor working conditions in the American meat-packing industry.



## 1910 – 1920

### Invention/historic event

1910 Of the 140,000 farms in the Netherlands, nearly 120,000 have at least one horse. The number of pigs totals 1.2 million (10% of the present figure). The largest share of pigs can be found in Gelderland. Most of the pig farmers in the Netherlands have one to five pigs.

1914-1918 In the First and Second World Wars, private individuals in the United States, Canada, Great Britain and Germany lay out vegetable gardens known as Victory Gardens. The produce from these gardens slightly relieves the pressure on the public food supply.

1916 The 'Piggly Wiggly', the world's first supermarket, is opened in the United States.

1912 Horticulture makes great strides with the advance of glass and greenhouse farming. The recent inventions of the train and the steamboat subsequently make it possible to transport vegetables from A to B in a relatively short period of time. The export of market gardening products increases tremendously as a result.

1919 The top ten of the most cultivated crops in the Netherlands: rye, potatoes, oats, sugar beets, wheat, turnips, red clover, spurrey, barley and peas. Turnips and spurrey are grown as vegetables and as green fodder for the livestock. They are planted as an aftercrop on field where rye, oats or buckwheat have grown. Clover species, beans and peas infuse the soil with nitrogen. As artificial fertiliser becomes cheaper for farmers, nitrogenous crops disappear from the fields.

1911 71,518 farms (1 in 3) in the Netherlands are struck by a foot-and-mouth epidemic. The animals are not culled.

### Art

1912 Pablo Picasso, 'Table with bottle, wine glass and newspaper'.

1914 Juan Gris, 'The man in the café'. Café scenes are a popular theme among painters at the start of the 20th century.

### Architecture, urban development and landscape architecture

1914 The Parisian café 'Les Deux Magots' opens its doors. It becomes a meeting point for artists, writers and philosophers like Oscar Wilde, Guillaume Apollinaire, Pablo Picasso, Ernest Hemingway, Jean-Paul Sartre and Simone de Beauvoir.

1919 Thanks to a subsidy from the Municipality of Amsterdam, a school garden complex can be laid out on Oude Hemweg. The 'Amsterdamsche Vereeniging voor Schoolwerktuinen' takes care of the school gardening work. Food supply is the main reason why the association is founded.

### Literature, film and music

1913 The enjoyment of a Madeleine cake dipped in a cup of tea stirs recollections in Swann of his youth in Combray. In his novel 'In Search of Lost Time', Proust describes the Madeleine as a 'little scallop-shell of pastry, so richly sensual under its severe, religious folds.'

## 1920 – 1930

### Invention/historic event

1923 Mrs. Wilmer Steele of Delaware in the United States buys 500 chickens and is the first person to raise chickens as a market product. In the decades that follow, the chicken industry in the US develops into an industry of huge proportions.

1923 A cow in the town centre becomes a rare sight. Angry shopkeepers and café owners in 's-Hertogenbosch send a letter to the municipal council in which they share their dissatisfaction about the plans to relocate the cattle market to a location outside the centre. They do not like to see their customers moving elsewhere. The farmers are also worried they will miss the sociability of the town centre. To no avail. In 1931, the new Brabantthal is opened at a location on the outskirts of the city. In this period, the cattle market is moved to the outskirts of town in many Dutch towns.

1925 A carpenter in Norway invents the cheese slicer.

### Art

1924 Alexander Rodchenko, 'Zebra biscuits packaging'.

1925 In his work, artist Chaim Soutine is inspired by the many slaughterhouses in the cities. In 1925, he paints 'Beef Carcass'.

### Architecture, urban development and landscape architecture

1922 Welwyn Garden City in the English county of Hertfordshire is both a New Town and a Garden City. After the construction of the nearby Letchworth Garden City in 1903, Ebenezer Howard once again gives concrete shape to his ideas on the Garden City.

1925 J.A Brinkman and L.C. van der Vlugt design the Van Nelle factory. Here, tea and coffee are processed into market-ready products.

1926-1928 Adopting the motto 'light, air and sun', Walter Gropius designs the settlement Siedlung Dessau-Törten for low-income population groups. The homes, which stand in rows, all have a kitchen garden, known as a 'Gemüseanbau'. The residents can also keep small stock for their own use.

1926-1929 Architect Leopolt Fischer, together with landscape architect Leberecht Migge, designs the settlement Siedlung Ziebegk in Dessau. The homes feature a great deal of glass and kitchen gardens.

1927 Margarete Schütte-Lihotzky is the first woman in Austria to follow an architecture study. She designs the Frankfurter Küche, which is used as a built-in kitchen in Ernst May's Siedlung architecture. The kitchen is considered the prototype of the modern-day built-in kitchen.

1928 Poggenpohl, established in 1892 by master cabinet maker Friedemir Poggenpohl, presents the reform kitchen, a structure of interconnected cabinets with a functional arrangement – a precursor of the later modular and built-in kitchens.

### Literature, film and music

1923 Bertolt Brecht writes the play 'In the Jungle of Cities'.

1926 The most prestigious writers' conference, the 'Bread Loaf Writers' Conference', is held for the first time. It owes its name to its location: the Bread Loaf Inn in Middlebury, Vermont.

## 1930 – 1940

### Invention/historic event

1930 Crisis in agriculture. With the arrival of new food-producing countries like Canada, Australia and Argentina, European farming is thrown into crisis.

1930 Establishment of Unilever.

1932 Introduction of Freon, a group of chlorofluorocarbon haloalkanes that is primarily used in refrigeration systems and aerosols. It allows the refrigerator to be developed into a mass product.

1935 Freeze-drying is employed for the first time.

1937 Prof. ir. M. Visser develops the Wageningen 'car tractor'. The farming crisis inspires his idea that old cars can easily be converted into tractors.

1937 When the product 'Hormel Spiced Ham' becomes less popular, the manufacturer opts for the name 'Spam'. Spam stands for 'Shoulder of Pork and Ham'. The product becomes wildly popular under the new name.

1939 The Rijksbureau voor de Voedselvoorziening in oorlogstijd (Government Agency for Food Supply in Times of War) is established.

### Art

1930 The futurist Filippo Tommaso Marinetti publishes the 'Manifesta della Cucina Futurista'. People are no longer allowed to eat pasta, as this makes them lazy. Furthermore, there should be absolutely no talk of politics at the table. Ideally, a meal should take place in a fake airplane.

1930 Grant Wood, 'American Gothic'. The painting portrays a man with his daughter. The man holds a pitchfork, symbolising hard labour.

1930 Meret Oppenheim makes 'My Governess', an artwork consisting of ladies shoes with miniature 'chef's hats' slipped on to the heels. The arrangement looks exactly like a pre-packaged factory chicken. The work can be interpreted as a critique of the stereotypical portrayal of women as 'chicks and hens'.

1931 The futurists, headed by Marinetti, organise futurist dinners in La Taverna Santapalato in Turin.

1935 Thomas Hart Benton, 'A Social History of Missouri'.

### Architecture, urban development and landscape architecture

1932 In his article 'The Disappearing City', Frank Lloyd Wright sets forth his ideas on town planning in what he refers to as 'Broadacre City'. Broadacre City is a planning statement and a socio-political 'pamphlet'. In the city as the architect envisions it, all inhabitants are provided with their own plot of land, so that they can live in self-sufficiency. The city is furthermore characterised by large traffic arteries that run from the residential areas to the city centre, where the train station and the offices are located. The architect believes that one will grow into a better person by living in an environment like Broadacre City.

1932 Leberecht Migge writes 'The Green Manifesto'.

### Literature, film and music

1930 The Russian Alexander Dovshenko creates an ode to the burgeoning collectivism with the film 'Zemlja' ('The Earth'). His subjects including waving corn fields and the cheering with which the first tractor entering a Soviet village is greeted.

1939 John Steinbeck writes 'The Grapes of Wrath', a novel about sharecropper families from Oklahoma who, destitute as a result of the agricultural crisis, leave their homeland and move to California to work there as day labourers.

## 1940 – 1950

### Invention/historic event

1940-1950 In the 1940s, salmon disappears from the waters of the Rhine. Thanks to the improvement of the quality of the water in the major rivers, salmon resurfaces at the start of the 21<sup>st</sup> century and increases in number.

1940 The first McDonald's restaurant is opened in San Bernardino, California, by the brothers Mac and Dick McDonald.

1943 The United States sees a ban on pre-sliced bread. As a precaution, the metal from the slicing machines is rationed in case it becomes scarce in times of war.

1947 The American Percy Spencer of the Raytheon firm invents the microwave, named the 'Radarange'.

1948 Invention of deep-frozen French fries.

1948 The McDonald brothers introduce their innovative 'Speedee Service System'.

1945 12 bottles of Chateau Mouton-Rothschild that were bottled in Pauillac in the French Médoc in 1945 are sold for a record total of EUR 200,000 in 2008.

1946 Invention of Tupperware.

1947 Marilyn Monroe is crowned the first 'Artichoke Queen' in Castroville, USA – the Artichoke Capital of the World.

### Art

1942 Edward Hopper's painting 'Nighthawks' depicts two people sitting in a diner at night.

1944 -1945 Cas Oorthuys photographs the hunger winter in Amsterdam.

### Architecture, urban development and landscape architecture

1940-1945 Just like during World War I, private individuals during the Second World War lay out Victory Gardens in the United States, Canada, Great Britain and Germany. At the end of the war, Victory Gardens are responsible for some 40% of the food supply in the United States.

1945 Until the end of the Second World War, most allotment gardens are true kitchen gardens. In the course of the 1940s, the allotment garden loses its economic function and the ornamental garden gradually comes into fashion.

1945-1960 There is large-scale land consolidation in the Netherlands.

### Literature, film and music

1941 Jazz musician Fats Waller records the song 'All That Meat and No Potatoes'.

1943 Lady Eve Balfour writes 'Towards a Sustainable Agriculture - The Living Soil', an important text for the Organic Movement: "The most frequently heard argument is that intensive chemical farming provides the only hope of feeding the expanding world population and has therefore to be accepted whether we like it or not. To me it seems probable that the exact opposite could prove to be the case, and that it is an alternative and largely organic agriculture that will be forced upon us whether we like it or not. This is because, as is becoming increasingly apparent, the days of the former are numbered. One reason is the enormous demands on the world's non-renewable resources of energy, made by our Western life-style in general, and modern farming techniques in particular. Another is that modern methods are putting strains on the biota which is causing it to collapse."

1943 The American writer Mary Frances Kennedy Fisher writes novels that are often about food, such as 'The Gastronomical Me'. Fisher considers 'eating well' one of the basic arts of living.

1945 George Orwell writes 'Animal Farm'.

## 1950 – 1960

### Invention/historic event

1953 The schijf van vijf ('disc of five', illustrating the five principal ingredients of a proper diet) is launched by the Dutch Nutrition Information Agency.

1953 Kellogg's introduces Sugar Smacks, a breakfast cereal. It contains 56% sugar.

1954 'TV Dinners' are invented in the United States. C.A. Swanson & Sons introduce a meal containing turkey in broth with sweet potato and peas, which they sell for 98 cents. The meal needs to be heated in an oven. Swanson drops the name 'TV Dinner' in 1962.

1956 80% of the households in the US has a refrigerator. In Great Britain, 8% of the households have a fridge.

1957 The Treaty of Rome is signed. Agreements are made to further expand the economic collaboration between countries that are part of the European Economic Community (EEC). The emphasis during implementation is however on the creation of a uniform system of agricultural subsidies.

1959 The United States has 32,000 supermarkets. These stores sell 69% of all food.

### Art

1953 In Theatre de l'Etoile, Salvador Dali carries out his performance with a 12-m loaf of French bread.

1958 Robert Rauschenberg, 'Coca-Cola Plan'.

1959 Marcel Duchamp, 'Torture-Morte', a still life of marzipan with insects.

### Architecture, urban development and landscape architecture

1954 General Electric introduces a coloured standard kitchen. Before 1954, all standard kitchens are white.

1956 Victor Gruen designs the first fully enclosed shopping mall, Southdale Center in Minneapolis. The regional shopping mall will have a major impact on the American suburban landscape. A number of inventions were necessary to arrive at the specific typology of the shopping mall: the car, the air conditioning unit and the escalator.

1959 In New York, the famous Four Seasons restaurant opens in the brand new Seagram Building. The interior is designed by Philip Johnson and Ludwig Mies van der Rohe. Van der Rohe is also responsible for the design of the Seagram Building, the headquarters of the Canadian Seagram Company, at that time the largest distiller in the world.

### Literature, film and music

1950 The comic strip 'Peanuts' by Charles M. Schulz is published for the first time.

1954 One of the first health food books, 'Let's Eat Right to Keep Fit' by Adele Davis, is published.

1955 Little Richard releases the song 'Tutti Frutti'.

1957 The BBC produces a film about the 'spaghetti harvest' in Switzerland as an April Fool's joke.

## 1960 – 1970

### Invention/historic event

1960 In the 1960s, the European Union is confronted for the first time with a 'butter mountain'.

1960 8.3% of the American work force works as a farmer on a total of van 3,711,000 farms. A century before, in 1860, 58% of the American work force worked on 2,044,000 farms.

1960 Aluminium cans are used as a packaging for food for the first time.

1962 The first Wal-Mart opens its doors in the United States. Today, Wal-Mart is the largest supermarket chain in the world.

1963 Oxfam Novib initiates the 'Gast aan tafel' ('Guest at the Table') campaign, calling on people to donate a contribution to the amount of what an extra guest at the table would cost.

1965 Scaling up of the agriculture sector. In the space of a decade, the number of tractors in the Netherlands has increased from 45,000 to 130,000.

### Art

1961 In the work 'The Artist's Shit', Piero Manzoni seals his own excrement in cans, after which he offers the cans, which have been numbered, signed and marked with their weight and the label 'made in Italy', for sale, at the price of their weight in gold.

1961 More and more artists depict the food of the consumer society: Wayne Thiebaud, for example, who often paints pies, for instance in the work 'Pies, Pies, Pies'.

1962 Andy Warhol creates his famous work '100 Soup Cans'.

1962 Claes Oldenburg is another artist who allows himself to be inspired by the food of the consumer society. He makes large-scale sculptures, such as the work 'Two Cheeseburgers with Everything'.

1962 Ed Ruscha takes the canned meat product Spam as the subject for his painting 'Actual Size'.

1963 Roy Lichtenstein makes a painting of an immense hot dog: 'Hot Dog'.

1964 Andy Warhol makes the short film 'Eat'.

1964-65 In the work 'F-111', James Rosenquist paints an enormous painting in which an F-111 airplane is connected to a car tire, an atomic explosion, an umbrella and a plate of spaghetti. In place of the cockpit, Rosenquist paints a girl with a mischievous grin under a metal hair-drier shaped like a bullet. In this painting, the artist refers to the military and economic symbiosis in American imperialism.

1965 Daniel Spoerri starts making table installations. 'Table of the Restaurant of the City Galerie' consists of a tabletop including the remains of a diner in 1965 in the City Galerie in Zürich, Switzerland.

### Architecture, urban development and landscape architecture

1960 Green roofs become popular.

1960 Robert F. Tracy establishes Associated Dairy Products, a distribution centre for dairy products. With the development of more and more giant corporations in the field of food production, the distribution of food becomes an increasingly global affair. The food distribution centre becomes one of the most important building types in the food chain. The companies enjoy rapid expansion, so that eventually one could sooner speak of distribution towns than of distribution companies. Nowadays, Associated Dairy Products goes by the name Dot Foods, with the company distributing a wide range of food products. It is currently the largest distribution centre in the United States.

### Literature, film and music

1962 Harry Saltzman and Albert R. Broccoli produce the first Bond film, Dr. No.

1962 In 'Silent Spring', Rachel Carson describes the negative effects of the use of pesticides.

1963 Tennessee Williams writes the play 'The Milk Train Doesn't Stop Here Anymore'.

1964 Roald Dahl, 'Charlie and the Chocolate Factory'.

1967 Nigeria closes its border with the break-away province of Biafra, making it impossible to transport food to the area. This leads to a famine of unprecedented scale. This is the first time that people can see images of a famine on their television screens.

1967 The Beatles release the song 'Strawberry Fields Forever'.

1967 'Why the Kremlin hates bananas'. This American anti-communist propaganda film is made during the Cold War. The film shows images of the United Fruit Company's battle against the communist threat in Guatemala.

## 1970 – 1980

### Invention/historic event

1972 The Club of Rome, a private foundation established by a group of European scientists in the late 1960s in an effort to make their concerns about the Earth's future known to a wider audience, publishes the report 'The Limits to Growth'. In this publication, the scientists warn of the depletion of fossil fuels.

1973 The first oil crisis involves a global – artificially created – shortage of oil. The crisis originates in a number of politically motivated actions targeting the West by the Arab oil-producing nations. The Arab countries increase the oil price by 70% and reduce the oil production by 5% a month, so that the price per barrel rises exponentially.

1973 Besides leading to a shortage in petroleum, the oil crisis results in the scarcity of gum arabic, a product used in the manufacture of liquorice. Manufacturers therefore switch to the cheaper gelatine and modified starch and (later on) to xanthan gum.

1974 Invention of the bar code.

1977 Members of the working committee 'Beter Zuivelbeleid en het Agrarisch Jongerencontact' ('Better Dairy Policy and the Agrarian Youth Contact') demonstrate in front of the Dutch Parliament against the 89 cent levy on a litre of milk which the EEC plans to impose on farmers as of 16 September 1977.

1979 Second oil crisis.

### Art

1970 Duane Hanson, 'Supermarket Lady'.

1970 Allan Kaprow builds his 'Sweet Wall' opposite the Berlin Wall – a brick wall with mortar made of bread and marmalade.

1972 In New York, Gordon Matta-Clark opens a gallery restaurant: 'Food'. He owns the establishment and regularly cooks there. A famous dish is Matta-Clark's 'bone dinner', which costs USD 4. It is a meal consisting of among others oxtail soup, roasted marrowbone and frog's legs. Matta-Clark's example of the gallery as restaurant would go on to be widely copied by other artists.

1973 Artist Carl Andre creates 'American Decay', a work consisting of 150 kg of cottage cheese covered in 40 litres of tomato ketchup. The work represents the decadence of President Nixon.

1974 Bonnie Sherk opens 'Crossroad Community', an urban farm located literally in the midst of the tangled infrastructure of San Francisco. Her social artwork combines a range of disciplines and cultures and functions until 1980. It is exceptional at this time that an artist takes on the role of initiator of a social project of this kind. Today the site of the former farm accommodates a cultural-ecological park.

1974 Artist Dieter Roth grinds up the Suhrkamp Taschenbuch editions of the oeuvre of Georg Wilhelm Friedrich Hegel to form 22 sausages of varying sizes, referred to as 'Literature Sausages'.

1975 In her feminist film 'Semiotics of a kitchen', Martha Rosler shows a woman at work in the kitchen. The artist treats the kitchen as a 'war zone' in this film, in which the routine preparation of a meal masks the frustration felt by the woman because she is limited in her options by the confines of the home.

1977 For the Documenta 6 exhibition in Kassel, Joseph Beuys designs 'The Honey Pump', an apparatus that pumps honey through plastic tubes in the staircase of the Fridericianum museum by means of turbines rotating in a large lump of fat. Beuys calls the work the 'Blutstrom für die Gesellschaft' ('Bloodstream for Society'). For the artist, honey functions as a supply of energy, while fat serves as a heat reservoir. The copper rod at the end of the tubes serves as a conductor for and indicator of the right direction of the thoughts and actions of society.

1979 Giuseppe Penone, 'Potato'.

### Architecture, urban development and landscape architecture

1970 Bonnie Sherk designs the Portable Gardens in San Francisco.

1970 The 'cauliflower neighbourhood' (also referred to as the 'spaghetti neighbourhood') is introduced in Dutch urban planning. The structure of these neighbourhoods – clusters of twisting roads along a main road, resembles that of a cauliflower.

1973 The Guerrilla Gardeners 'squat' a plot of public space and lay out a garden there. The term 'Guerrilla Gardening' is used for the first time by the American Liz Christy and her Green Guerrilla Group on the corner of the Bowery and Houston Street in New York, USA.

1974 London's flower and vegetable market is held in Covent Garden for the last time.

#### Literature, film and music

1970 Harry Nilsson releases the song 'Coconut'.

1971 The Czech writer Bohumil Hrabal writes about the adventures of Ditie, a hotel servant working in the colourful catering industry of 1940s Prague. Ditie serves the King of England, becomes rich and then poor again.

1973 Salvador Dali publishes 'The Dinners of Gala', a cookbook that sums up his way of thinking.

1973 'La grande bouffe', a film by Marco Ferreri.

1973 Colin Ward publishes 'Streetwork'. The anarchist sees the urban environment as an area that children can learn in and from. Ward's objective is the development of a school programme enabling pupils to actively involve themselves in the decision-making process surrounding local urban issues. Ward's ideas are given concrete form in the United Kingdom and the United States with projects like 'Schools without Walls'.

1971 Frances Moore Lappe writes the bestseller 'Diet for a Small Planet', in which she argues for a vegetarian diet.

1978 'Eating Oil' is the title of a book written in response to the first oil crisis. The book aims to study to which extent the food supply in industrialised countries is based on fossil fuels.



## 1980 – 1990

### Invention/historic event

1980 The 1980s sees the development of the ready-to-eat freezer meal.

1980-2000 In the last decades of the 20th century, the cotton fields of the US states of Mississippi, Arkansas, Alabama and Louisiana are converted into catfish farms. Cotton farms are particularly suited for such a conversion because the irrigation systems can be recycled when farming fish.

1983 McDonald's introduces Chicken McNuggets. A year later, as many as 3.5 billion McNuggets have already been sold in the United States. Mothers in particular are glad about the fast-food chain's decision to offer this 'healthy' alternative for the hamburger.

1983 French's Dijon Mustard is introduced.

1985 The 'Live Aid' benefit features simultaneous performances in the United States, Great Britain and other smaller locations, including The Hague. The organisation is handled by Bob Geldof and Midge Ure. The event raises money for famine-stricken Ethiopia.

1985 The Renfrew Center, the first clinic in the world where patients with an eating disorder can stay on a long-term basis, is established in Philadelphia in the United States.

1985 The first Dutch farmer's market takes place at the Noordermarkt in Amsterdam.

1987 A herd of cattle is sold at auction following a bid via a satellite connection. This is the first 'virtual' sale of livestock.

### Art

1980 'Economic Values' by Joseph Beuys consists of a collection of groceries from Eastern Germany. The wares are carefully arranged on old metal shelves. This installation confronts the viewer with the historic reality of the poignant disparities between East and West. The sparse, cheerless appearance of the products suggests that there is a difference in value criteria between East and West that is determined by the economic situation.

1982 In 'Wheatfield, a Confrontation', Agnes Denes plants corn on one of the most expensive plots of land in Manhattan's business district (USD 4.5 billion). The work refers to commerce, global trade, overproduction, hunger and ecological issues.

1987 Krijn Giezen designs a greenhouse for a prison in Hoogeveen, where the inmates can produce (exotic) food. The yield is so great that the produce is offered to shops selling organic food in the vicinity of the prison.

### Architecture, urban development and landscape architecture

1989 After the collapse of the Soviet Union, there is an oil crisis in Cuba. Urban horticulture flourishes, with 80% of the agriculture being organic.

1989 The period after the oil crises of the 1970s brings the collapse of the Detroit car industry, and many residents leave the city. Detroit experiences urban contraction. The founders of 'The Greenings of Detroit' do not merely see vacancy as a problem, but also as an opportunity to reintroduce green space in the urban landscape. They start an educational programme in which they actively involve residents in the development of gardens on empty city lots.

1989 Rirkrit Tiravanija starts to organise dinner in galleries and museums. He (often) cooks traditional Thai curry courses which he offers to the venues' visitors. The artist usually works as follows: he strips the entire gallery, builds a little kitchen, puts in tables and chairs and starts cooking. The only fixtures left intact are the reception area or the work area of the gallery owner, so that the visitor is reminded of the fact that he or she is in an art venue.

### Literature, film and music

1982 In his film 'Diner', Barry Levinson portrays a group of friends standing at the threshold of adulthood. The friends are filmed during their regular meetings in a restaurant that functions as their 'second living room'.

1984 Hugo Claus writes the play 'Sugar'. The play is situated in and around a confectionary factory in France.

1987 Gabriel Axel directs the film 'Babette's Feast'.

1988 Banana Yoshimoto writes the novel 'Kitchen'.

1989 The Slow Food manifesto, drawn up by the Italian Folco Portinari, is signed by 15 countries in Paris.

1989 Peter Greenaway makes the film 'The Cook, The Thief, His Wife & Her Lover', in which a man murders the lover of his wife, after which the woman confronts her man by forcing him to eat a meal consisting of the cooked lover as prepared by the cook.

## 1990 – 2000

### Invention/historic event

1990 It costs 4 kg of pig feed to produce 1 kg of pork for consumption.

1992 Outbreak of Bovine Spongiform Encephalopathy, also called BSE or mad-cow disease. Afflicted cattle are rejected for human consumption.

1992 The first McDonald's in China is opened in Beijing. It is the largest McDonald's in the world and employs 1,000 people.

1995 Establishment of the World Trade Organization (WTO), an intergovernmental organisation with supranational characteristics. The organisation originates in the General Agreement on Tariffs and Trade.

1995 Cardinal Ratzinger, Prefect of the Congregation for the Doctrine of the Faith, gives permission for the use of gluten-free wafers during the Eucharist. This is under the condition that the believer can present a doctor's certificate. Gluten-free hosts provide the solution for Roman Catholic believers who suffer from a specific metabolic disorder but also want to attend communion. After all, it is stated in the book of canonical law that the bread should be of 'pure wheat flour'.

1996 Genetically modified soy is introduced.

1996 The 'Oil for Food' programme is launched in Iraq. The programme is instated by the UN Security Council to help the Iraqi population in compensation for the heavy economic sanctions targeting the regime of Saddam Hussein. Under this programme, Iraq is allowed to sell oil under UN supervision. The proceeds need to be used for the acquisition of food, medicines and other humanitarian items. However, the spending of the proceeds is marred by corruption.

1996 The sheep Dolly, the first cloned animal in the world, is born in the Roslin Institute in Edinburgh, Scotland.

1997 An American company takes out a patent on basmati rice. Rice farmers in India are enraged, arguing that basmati rice has for centuries been part of the Indian cultural heritage and therefore cannot be patented by a foreign firm.

1997 Over a million chickens are slaughtered in Hong Kong in connection with bird flu.

1998 Every day, 35,000 people die of hunger. In the entire 20th century, 70 million people die due to famine. 90% of these deaths are as a result of chronic malnutrition, and 10% due to general famine or war.

1999 The margarine brand Zeeuws Meisje turns 106.

1999 Bio-diversity is under pressure. At the end of the 20th century, 80-90% of the fruits and vegetables that existed at the end of the previous century have disappeared.

### Art

1991 In 'Bossy Burger', a performance by Paul McCarthy, a clown with a white chef's hat gives a cooking demonstration. The clown gradually creates a chaos of mayonnaise, milk, ketchup, turkey and flour. What started out in good fun degenerates into an orgy of filth, sexual violence and anarchy.

1992 Gabriel Orozco, 'Cat in the Jungle'.

1994 Jason Rhoades makes a gun that can shoot French fries: 'A.B.S. Gun with Pom Fritz Choke'.

1995 Bik Van der Pol makes 'The Kitchen Piece', a perfect reflection of Jos van der Pol's kitchen unit. The fully functional kitchen is exhibited in various galleries and museums. Jos van der Pol: 'Out of optimistic anger, we decided that for a change, we wanted to show something different to the umpteenth exhibition for a limited group of benevolent friends and art lovers. We found the art world so closed-off and self-absorbed – we hoped to break through this. We wanted to evoke the discussions we ourselves had in different locations, by creating a space for them. The Kitchen Piece was such a space, where talented people could simply pull up a chair and join in the discussion.'

1997 Anthony Key, 'Gam Saam' (Gold Mountain).

1997 In 'Morphotheque #9', Driessens & Verstappen show roots that, with the exception of one 'straight' example, take all sorts of strange shapes. 'Because these differently formed products do not conform to the standard, they are not allowed to be offered to the consumer, and we never get to see these form variants. If this does happen, by accident, they are associated with pathological deviations, sickness, degeneration and ugliness,' state the artists.

1998 For the Kievitswijk neighbourhood in Tilburg, the biological and ethno-pharmacological researcher, philosopher, publisher and artist herman de vries designs the 'Tuindorpcollecties', a planting scheme for a newly developed district. He proposes planting various collections of shrubs, avenue trees and fruit trees. They are each accompanied by their own name-stone in the pavement and are described in a guide. The collections have been assembled to bring the residents of the garden village in contact with a wide variety of trees and bushes. Each front garden of the 102 rental homes has a different apple, pear or plum tree. The public areas feature rose bushes and other bushes, rowans and cherry trees; and in Mechelenstraat, there is a row of 36 different tree species.

1998 Dieter Roth starts working on his 'Fungus Museum'. He fills a 'museum' with artworks made from material that is edible and can therefore become mouldy. By 2003, this has grown out of all proportions and the museum shuts down because nothing is left of the works.

1999 After 22 years of restoration work, Leonardo da Vinci's 'Last Supper' is once again shown to the public in Milan, Italy.

#### Architecture, urban development and landscape architecture

1990 Ever since graduating, the Brit Fergus Drennan has lived off wild plants and road kill. Knowledge and experience are essential for staying alive. The Brit is not bothered by much competition from his fellow human beings – after all, they have generally forgotten that you can consume the berries on the bush near the petrol station.

1990 The Ecologische Hoofdstructuur ('Ecological Basic Structure') is introduced in the Netherlands.

1999 The microbiologist and ecologist Dickson D. Despommier develops 'Vertical Farming'.

#### Literature, film and music

1991 Jean-Pierre Jeunet and Marc Caro direct 'Delicatessen'.

1998 Ettore Scola directs 'The Dinner'.

1998 The Brit Jamie Oliver appears for the first time on television as 'The Naked Chef'.

## 2000 – 2015

### Invention/historic event

2001 The whole of Europe is struck by a foot-and-mouth epidemic. Many even-toed ungulates are culled as a precautionary measure.

2001 Genetically modified organisms are allowed to be put on the European market, under very strict conditions.

2001 The Japanese Takeru Kobayashi has been the world eating champion for six years in a row. In 2001, he eats 50 hot dogs in 12 minutes. In 2007, in the same period of time he stuffs 63 hot dogs in his mouth, but he is beaten by Joey Chestnut who eats 66.

2002 Every year, 700 tons of whale meat is converted into pet food.

2002 120 tons of tomatoes are thrown away in the annual Tomatina Festival in the Spanish town of Buñol.

2005 The 'Convenant Overgewicht' ('Obesity Covenant') is signed by ten parties, including the Minister of Public Health, Welfare and Sport, the Minister of Education, Culture and Science, the Dutch Food Industry Federation (FNLI) and the health insurance sector organisation Zorgverzekeraars Nederland. As 40% of adult Dutch are overweight and 10% are severely overweight (obese), combating this phenomenon forms a spearhead in the prevention policy of the Ministry of Public Health, Welfare and Sport. Twenty partners by now support the covenant.

2006 With the slogan 'Een kip of een varken kan niet kiezen, jij wel' ('A chicken or pig can't choose, you can'), the Netherlands Nutrition Centre aims to get people to stop and think about how their product selection in the store affects the lives of chickens and pigs.

2006 Supermarket Albert Heijn includes 27 halal products in its product range.

2007-2008 There is a worldwide food crisis. Food prices rise tremendously. The causes of the food problems remain a topic of discussion. Unusual droughts in grain-producing nations and a rising oil price at the end of 2006 are put forward as major factors.

2008 For the first time, half the world's population, some 3.3 billion people, lives in cities, according to the United Nations.

2008 24,000 people die of hunger a day.

2008 With the 'New Amsterdam Market', the forgotten tradition of holding a public market with regional products in the heart of New York sees a new life. This tradition started in 1624, when Cryn Friedrickz sailed from the Dutch Republic to New Amsterdam (the present New York) and established in writing that besides a school and a hospital, the new town should also have a public market square where products from the region – New Netherland – would be traded.

2009 The outbreak of Mexican flu leads to the decision of the Egyptian government to slaughter all pigs as a precautionary measure. People around the world are displeased with this measure. Many suspect the government of having religious reasons for slaughtering the animals.

2015 Abolition of the milk quota.

### Art

2001 Helmut Dick, 'Gropiusstadt'. Artist Helmut Dick plants a field of fresh green lettuce as the 'shadow' of a flat in Gropiusstadt in Berlin. The residents of the flat are offered the yield.

2001 The Belgian artist Wim Delvoye develops 'Cloaca', a machine designed to precisely simulate the human digestive system. The machine gets three meals a day, and once a day excretes a turd that is completely identical to human faeces. In order to finance the project, Delvoye sells the droppings for 2,200 guilders a piece as turds that have been varnished and cast in polyester. The artist's work refers to both the ready-mades of Marcel Duchamp and Piero Manzoni's 'The Artist's Shit'.

2001 Nils Norman designs 'Geocruiser. The Mother Coach. Zone: Earth', a fully functional ecological bus with a library that contains books about radical gardening, eco-activism, sustainability and collectivism. There is a greenhouse in the back of the bus.

2004 The Danish initiative Learning Site develops a plan for 'Underground Mushroom Gardens' in buildings' unused spaces.

2005 For the project 'Not a Cornfield', 130,000 m<sup>3</sup> of industrial site is transformed into a field of maize for the length of one agricultural cycle of sowing, growth and harvest. Lauren Bon, the initiator of the work, sees the field as a sculpture. For years, the local population had called the site 'The Cornfield'.

2005 Artist Fritz Haeg starts converting gardens in the American suburbs (often unimaginative, water-guzzling and pesticide-rich lawns) into luscious food production sites.

2005 Jan van IJken photographs the relationship between humans and animals. In 2005, the photographs are bundled in the book 'Dierbaar...' ('Beloved...').

2006 Artist Annechien Meier designs the 'Mobile Allotment' for the new residential development of Ypenburg and the Hague neighbourhood of Transvaal – a vegetable garden on wheels for local residents and visitors to the neighbourhood.

2006 Matthijs Vogels, 'Waste Ware', a design for a service made from recycled material.

2006 Artist Tilmann Meyer-Faje drives with his mobile mini snack bar the 'Buurtkroket' ('Neighbourhood Croquette') through Stedenwijk Noord in Almere. His actions connect to a virtually lost tradition – that of the fishmongers and ice-cream salesmen with their carts, or the SRV driving mini-markets on the street corner. Through his croquette-mobile, Meyer-Faje creates a fiction which according to the artist could have become reality in a recent past. In his rounds with the 'Buurtkroket', the artist enters into dialogue with neighbourhood residents. As a result, local residents are active participants in his artistic orchestration.

2006 Together with Wim Timmermans, associated with the Alterra research institute in Wageningen, artist and urbanist Ton Matton uses the 'Climate Machine' to study how special plants like pineapple and manioc can be grown. The machine is made in the context of the WIMBY! (Welcome into My Backyard!) project in Hoogvliet, Rotterdam.

2006 Olaf Breuning, 'Bread vs Potato'.

2006 Raul Ortega Ayala, 'Melting Pots / a fiction based on facts'.

2007 For three years, designer Christien Meindertsma studies which products can be made out of pigs. Ammunition, medicines, photo paper, heart valves, brake discs, chewing gum, porcelain, cosmetics, cigarettes, hair conditioner and bio-diesel are just a few examples. 'PIG 05049' is the catalogue of the study: a book with a meat stamp on the cover and a yellow plastic ear tag on the spine.

2007 Lonnie van Brummelen and Siebren de Haan, 'Monument of Sugar'.

2007 Designs of the Time (DOTT 07) organises a town meal for the entire population of the English town of Middlesbrough. The meal consists of vegetables and fruit grown by the residents themselves in mobile, personalised kitchen gardens or allotment gardens and of meat from animals that they themselves held.

2007 Studio Makkink & Bey design a garden for the De Bolder assisted living centre for Alzheimer patients, by stacking bags of potting compost on top of each other. Edible and decorative plants grow through the bags and the selection of plants can be adapted in modules, depending on the season or once the earth in the bags no longer nourishes the plants.

2009-2010 Foodprint Manifestation in Stroom Den Haag. The Foodprint programme deals with the impact of food on the culture, structure and functioning of cities in general and of The Hague in particular. With this manifestation, Stroom aims to give an impulse to thought about the relationship between food and the city, by bringing artists and designers in connection with the issues surrounding food production.

2009 Atelier Van Lieshout, Christien Meindertsma, Debra Solomon, Driessens & Verstappen, Niels Norman and Winy Maas & the Why Factory are invited by Stroom Den Haag to study the current importance for The Hague of this topic and to make new work especially for Foodprint.

#### Architecture, urban development and landscape architecture

2000-2001 In the film 'Pig City', the architects' firm MVRDV shows opportunities for further concentrating the pig production industry. The pig apartment blocks that make up Pig City bring the pig farming and meat processing facilities together under one roof. This minimises transport and allows for recycling. The building also houses a fish farm (for protein-rich pig feed), a slaughterhouse and a biogas installation, and the pigs have more room to rummage around in than in the present situation, thanks to the structure's balconies. The designers envision Rotterdam's Maasvlakte as a location for Pig City.

2003 The Danish bureau N55 designs 'City Farming Plant Modules'. These modules can be laid out in different shapes on city pavements and squares and used for planting (edible) plants.

2005 Bohn & Viljoen Architects, 'CPUL'. With the design of the Continuous Productive Urban Landscape (CPUL), the architects aim to offer a new, essential and sustainable infrastructure for the cities of the future. A CPUL is productive in an economic and social sense and offers room for relaxation and recreation, has green lungs and good accessibility. In their design process, the designers go in search of already existing open areas in the city, which they

connect to one another and finally to rural areas. The introduction of urban agriculture is an important design assignment in this context.

2005 'Flow-Food' is a spatial-culinary look into the future of the Dutch Landscape of 2070, developed by the Bergen Kolpa design agency. Letting the forces of both salt and fresh water loose on the Dutch landscape leads to an uncommonly rich biodiversity. During the second Architecture Biennale in Rotterdam, guests have a one-off chance to get a taste of this future landscape in the shape of a unique dinner.

2005 The Shanghai Industrial Investment Corporation engages the British engineering firm of Arup to develop an eco-city. Dongtang Eco-city is presented as the first of four eco-cities that Arup intends to design in China. The eco-city is self-sufficient in terms of water and energy, utilises 'zero energy building' and is intended to accommodate a population of around 500,000. Execution of the plans is halted prematurely, however.

2006 The architects Maurice Nio and Joan Almekinders publish the book 'EAT THIS!', in which they describe and show all manner of markets. The immediate cause for 'EAT THIS!' is a change to European regulations in 1995, at which time it is decided that the hygiene at all outdoor markets is required to improve within a ten-year period. This brings noticeable changes to the Dutch markets: refrigerated vans increasingly replace the old, familiar, open stalls. A deathblow for the classic market in the opinion of the architects, and yet another deterioration of our gastronomic culture.

2006 John Arndt designs the 'Kitchen of Terrestrial Mechanics'. In this kitchen, the designer makes use of phenomena that are normally taken for granted – such as gravity, evaporation, plant growth, static electricity, decomposition and digestion – as mechanical elements in a holistic kitchen design.

2008 WORK Architecture Company designs 'P.F.1' (Public Farm One) for the P.S.1 art centre in New York. P.F.1 forms an enormous 'carpet' of large cardboard tubes. The top layer of the installation functions like a real farm in which an abundance of vegetables and plants are grown. The installation is made out of sustainable materials.

2008 Architect Carolyn Steele introduces the term 'sitopia' in her book 'Hungry City'. The word derives from the Greek words sitos (food) and topos (place). With the sitopia concept, Steele calls on people to think about how we can structure the world more sustainably by focusing on food and food production.

2009 The Belgian architect Vincent Callebaut designs the 'Dragonfly' building, an enormous skyscraper on Roosevelt Island that is strictly reserved for agricultural functions. Across 132 floors (600 m), the design outlines a wide range of agricultural 'fields' for the production of grain, dairy, meat, vegetables and fruit.

2009 In the context of the Foodprint programme, Stroom Den Haag commissions two research assignments. Van Bergen Kolpa Architects, in collaboration with Vincent Kuypers (Alterra Wageningen), make a spatial model for the Landscape Supermarket: at an easily accessed site in Midden-Delfland, an entire supermarket will be cultivated on the basis of soil types and climate (either natural or simulated), where consumers can recreate and buy produce at the same time. LUST & Jan de Graaf map out different aspects of the Foodprint in The Hague, including what is consumed by the thousands of civil servants that populate the city on a daily basis. The lunches of ten ministry canteens are analysed with respect to their ingredients, with the researchers focusing each time on a single ingredient of which the origins are studied or, for example, its impact on the world's climate.

#### Literature, film and music

2004 Morgan Spurlock makes the documentary 'Super Size Me'.

2005 'We feed the world' is the name of a documentary by Erwin Wagenhofer, in which he goes in search of today's food producers.

2006 Al Gore's film 'An Inconvenient Truth' attracts a large worldwide audience.

2007 Food journalist Michael Pollan writes 'The Omnivore's Dilemma: A Natural History of Four Meals'.

2007 John Knechtel compiles the book 'Food'.

2008 Architect Carolyn Steele publishes her book 'Hungry City: How Food Shapes Our Lives'.

2009 Louise O. Fresco writes 'New Laws for Food'.