

# Henri Nestlé

1814–1890  
Bicentenary



From Pharmacist's Assistant to Founder of the World's Leading  
Nutrition, Health and Wellness Company



This is an abridged translation of the German original – *Henri Nestlé (1814–1890). Vom Frankfurter Apothekerhilfen zum Schweizer Pionierunternehmer* – by Albert Pfiffner, published by Chronos-Verlag, Zurich 1993. 330 pp, ISBN 3-905311-27-5.

This is an enhanced new edition on the occasion of the 200th birthday of Henri Nestlé. The first edition was published in 1995 with the title: *Henri Nestlé. From Pharmacist's Assistant to Founder of the World's Largest Food Company.*

# Henri Nestlé

1814–1890

From Pharmacist's Assistant to Founder of the World's Leading Nutrition,  
Health and Wellness Company



“My infant cereal has  
a tremendous future  
because there is no food  
to compare with it.”

Henri Nestlé 1868



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# Foreword

In 1867, Henri Nestlé, a 53 year-old entrepreneur from Frankfurt am Main, brought an infant formula (Nestlé's Milk Food) to market in the small Swiss town of Vevey. His small business thrived, particularly after 1905 when it merged with the Anglo-Swiss Condensed Milk Co., founded by the Page brothers in 1866 in Cham (Switzerland) and became a large, successful company that still proudly bears the name of its founder.

This book is an abridged version of Albert Pfiffner's comprehensive biography of Henri Nestlé. It describes the career of an entrepreneur, continually observing consumer and society's needs to find new opportunities to earn his living.

Henri Nestlé tried his hand at developing and manufacturing various products including mineral water, liqueurs, vinegar, fertilisers, liquefied gas and Portland cement. Not all of his projects were successful – quite the contrary – but he never gave up. Instead, he continued relentlessly to gain experience and knowledge whilst adapting to the ever-changing environment.

The breakthrough came with his Milk Food. Henri Nestlé recognised a need in society and applied the latest scientific findings to develop a suitable product to combat the raging infant mortality prevalent at the time. The product was marketed with a brand name that has since become recognisable in almost every country of the world.

Today, 200 years after the birth of its founder, Nestlé's activities bear testament to a remarkable continuity. Although the company has increased the number of its products and markets several times over, its passion for quality and the use of the latest scientific research to improve the nutritional value of its products remain unchanged. Much like Henri Nestlé, confronted with the special nutritional needs of babies, we aim to improve the quality of life of our consumers at all stages of their existence, whatever their situation and offer them healthier and tastier food and beverage choices.

“Henri Nestlé embodied many of the key attitudes and values that are still part and parcel of our corporate culture to this very day.”

Henri Nestlé, himself an immigrant from Germany, was instrumental in turning his company towards international expansion from the very outset. We owe much more than just our name, our logo and our first infant formula to our founder. Henri Nestlé embodied many of the key attitudes and values that are still part and parcel of our corporate culture to this very day: pragmatism, flexibility, the willingness to learn, impartiality and respect for other people and cultures. 150 years ago, Henri Nestlé laid the foundations that have enabled us to become the world leader in nutrition, health and wellness.

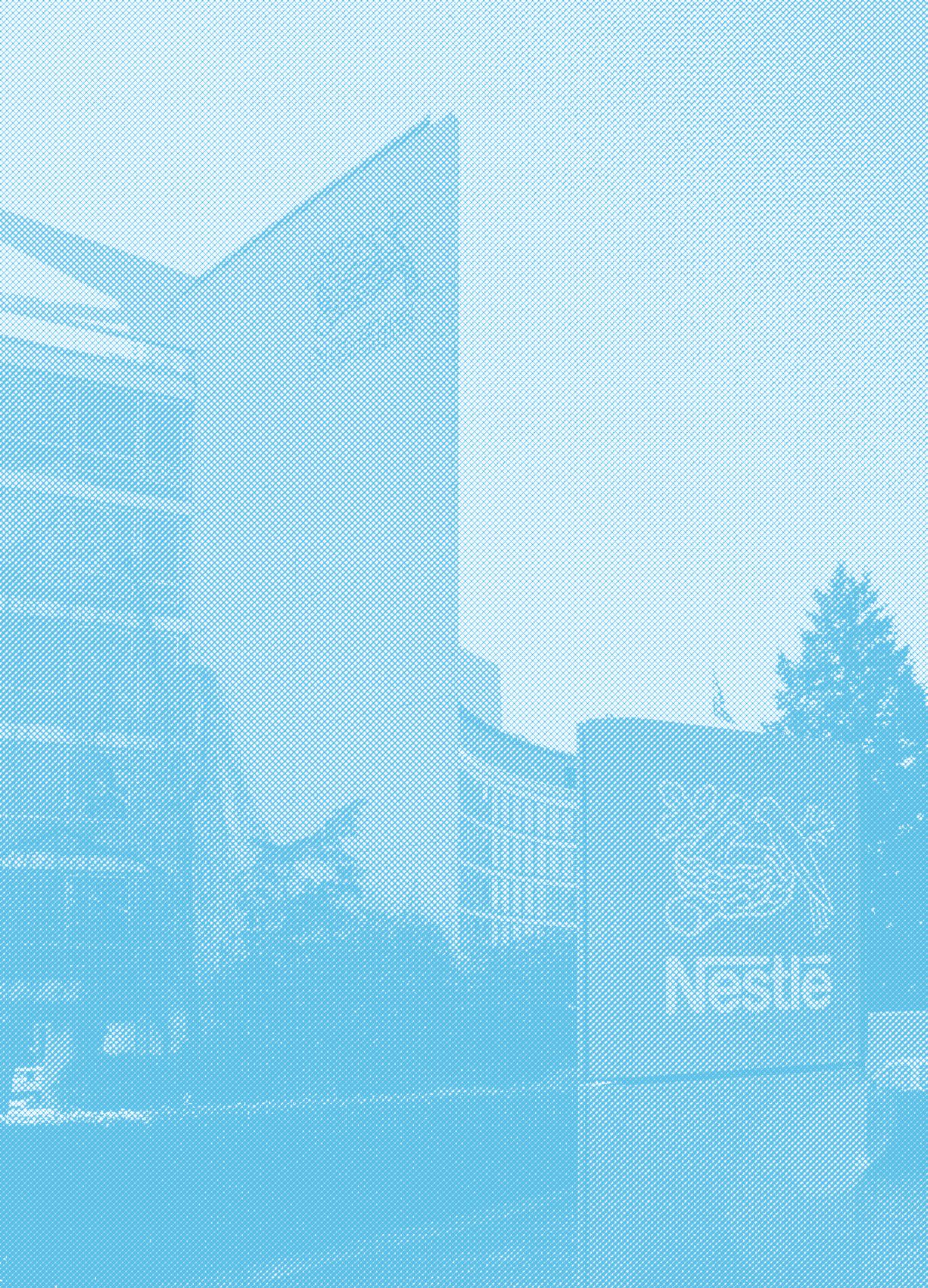
To explain this development further, we have added a section to this new edition that briefly summarises our efforts in this area.



Peter Brabeck-Letmathe  
Chairman of the Board of Directors



Paul Bulcke  
Chief Executive Officer



# Nutrition – it's in Nestlé's DNA

## **From Nestlé's infant formula to the world leader in Nutrition, Health and Wellness**

The concept of "nutrition", in the sense of a healthy, balanced and enjoyable relationship with food, together with the logically connected keywords of "health" and "wellness", defines Nestlé's basic strategic orientation and can be traced back to the company's very beginnings. In 1867, Henri Nestlé worked together with doctors and scientists to develop the first complete baby food produced on a large scale, using the latest scientific findings. He created a high-quality product that responded to the nutritional needs of young children and the demands of their mothers, at the advent of industrialisation and urbanisation. However, Henri Nestlé did not rest on his laurels but continued to develop this product on a constant basis. His successors also stayed true to his legacy of always keeping up-to-date with the latest research in order to offer consumers healthy, tasty products with a high nutritional value. The company continued to apply this strategy when it started moving beyond the traditional area of milk-based products into more and more food categories, namely chocolate, where Nestlé refined Daniel Peter's pioneering method of combining cocoa and milk; the ground-breaking discovery of instant coffee; and culinary products, where Nestlé inherited the ideas of another food pioneer from the late 19th century, Julius Maggi, and further developed them in its own research.

Nestlé and its employees internalised the objective of making a contribution to healthy nutrition right from the start of the company's history. This aim did not become publicly visible until 1980, however, when former Chairman and CEO Helmut Maucher began focusing more intensively on the legacy of the company's founder as a pioneer of nutritional research, and made a concerted effort to step up Nestlé's research activities. This was confirmed in 1997, when the first task of his successor as CEO, Peter Brabeck-Letmathe, was to announce the establishment of the Nutrition Strategic Business Division (NSBD). Alongside the traditional infant nutrition business, this comprised new types of food that were also produced on the basis of scientific findings resulting from Nestlé's own research, such as probiotics and "Branded Active Benefits" (BABs), supplements with a health-promoting effect that were added to a growing number of existing products.

At the start of the new millennium, Peter Brabeck took another decisive step in announcing his intention to transform Nestlé from a traditional manufacturer of food products into a research-driven Food, Nutrition and Wellness company. To realise the third part of this "triad", he also created a Corporate Wellness Unit. After taking over as Chairman of the Board in 2005, Peter Brabeck replaced the notion of "food" with "health" thus enabling Nestlé to now define itself as a Nutrition, Health and Wellness (NHW) company. This new triad has proved decisive for the entire corporate strategy, including subsequent acquisitions and divestments. Indeed, Nestlé divested several business areas which it deemed could not provide any added value through any further development. It also made selective acquisitions that significantly strengthened the Nutrition area, such as American baby food manufacturer Gerber in 2006, the Novartis Medical Nutrition business in 2007 and Wyeth Nutrition, the infant formula division of the US pharmaceutical company Pfizer, in 2012. As a result of these acquisitions, Nestlé Nutrition, which emerged from the NSBD and had been operating independently since 2006, doubled its sales. The establishment of the Nestlé Nutrition Institute a year earlier confirmed Nestlé's ambition to play a leading role in this sector from a scientific point of view and constitutes the starting point for new developments.

The appointment of Paul Bulcke as the new CEO in 2008 was a further driving force, and 1 January 2011 saw the start of an additional key phase in Nestlé's development into a Nutrition, Health and Wellness company: the area of medical nutrition, which Nestlé had entered in the 1990s through its joint venture with Baxter and expanded through the integration of Novartis Medical Nutrition, became an autonomous business unit. Named Nestlé Health Science S.A. (NHSc), it specialises in preventative and personalised nutrition for people with particular health needs. On the same day, Nestlé

also opened the Nestlé Institute of Health Sciences (NIHS) on the campus of the Swiss Federal Institute of Technology in Lausanne (EPFL). This took the cooperation between Nestlé and the EPFL, which had started a few years previously with the Brain Food project, to a new level. Bringing together more than 100 researchers from all over the world, the institute is researching the diverse forms of interaction between nutrition, health and genomics, and thereby trying to find the causes of diseases such as Alzheimer's, diabetes, cancer and gastrointestinal diseases through their early detection and treatment. The NIHS also carries out research into new ways of combating obesity and its antonym, malnutrition, and looks into the special nutritional needs of an ageing population in industrialised countries. The NIHS, as a research-based institution and the NHSc, a commercial entity, work closely together on these projects. In 2012, NHSc acquired a minority stake in Accera, a company specialising in Alzheimer's disease, and entered into a joint venture with the Chinese company Chi-Med, which specialises in the treatment of gastrointestinal diseases by plants, thus providing Nestlé with access to traditional Chinese medicine.

By closing the gap between nutrition and medicine, NIHS and NHSc aim to improve quality of life through innovative nutrition, based on scientific research. It encompasses their goals and those of Nestlé, the Nutrition, Health and Wellness company. However, Nestlé continues to view itself predominantly as a nutrition company, rather than a pharmaceutical company, as its many years of experience have shown that, whilst consumers may want to be healthy, they are not prepared to sacrifice their enjoyment of food. Nestlé is, however, also aware that achieving and safeguarding a good quality of life requires more than just calories: today's consumers also expect their food to provide added value based on scientific criteria.

To readjust their needs regarding health, in 2014 Nestlé announced that it was reinforcing its activities in the specialized domaine of medical skin care by acquiring the remaining shares of Galderma, a joint-venture founded in 1981 with L'Oréal, the French Cosmetic company. Galderma will be incorporated into a new global business unit, named Nestlé Skin Health S.A. with its headquarters located in Lausanne, Switzerland. As an affiliate owned 100% by Nestlé, it aims to respond to the growing global need in the domaine of skin health by developing a large range of innovative and scientifically tested products. As NIHS and NHSc, this new company logically fits Nestlé's strategy for Nutrition, Health and Wellness.

At Nestlé, nutrition is not limited to research and the business areas that carry this name; it permeates the company's entire product portfolio. Before a new product is launched, regardless of its category, it is subjected to the strict "60/40+ test", in which 60% of test consumers must express

a preference for this new product over a comparable competitor product. The “+” designates that this product must also meet precisely-defined nutritional criteria. Since it was introduced at the start of the millennium, the vast majority of the many thousands of existing Nestlé products have been subjected to the test. Of these, 40 000 products have been adapted and those that did not meet the requirements have been eliminated from the range. This test has also enabled the sugar, fat and salt content of numerous Nestlé products to be reduced, and so has further contributed to healthy nutrition. This is also the idea behind adding micronutrients such as vitamins and minerals to food products, particularly in developing countries, for example to Maggi cubes in numerous African countries. In 2012, over 150 billion servings of food that had been enriched in this way were sold. Nestlé’s ambition is to increase this figure to around 200 billion per year by 2016.

In a further move aimed at improving nutrition, Nestlé began labelling its products with precise, easy-to-understand information about their composition over 10 years ago. Virtually all Nestlé products now include this “Nutritional Compass” as a useful guide for consumers. Half of all Nestlé products also come with information on Guideline Daily Amounts (GDAs), therefore contributing to the fight against obesity.

In addition to research and the production of high-quality food products, Nestlé’s commitment to the field of nutrition has also seen it move increasingly towards becoming a service company – for example, it provides a service offering personalised nutrition and care in France.

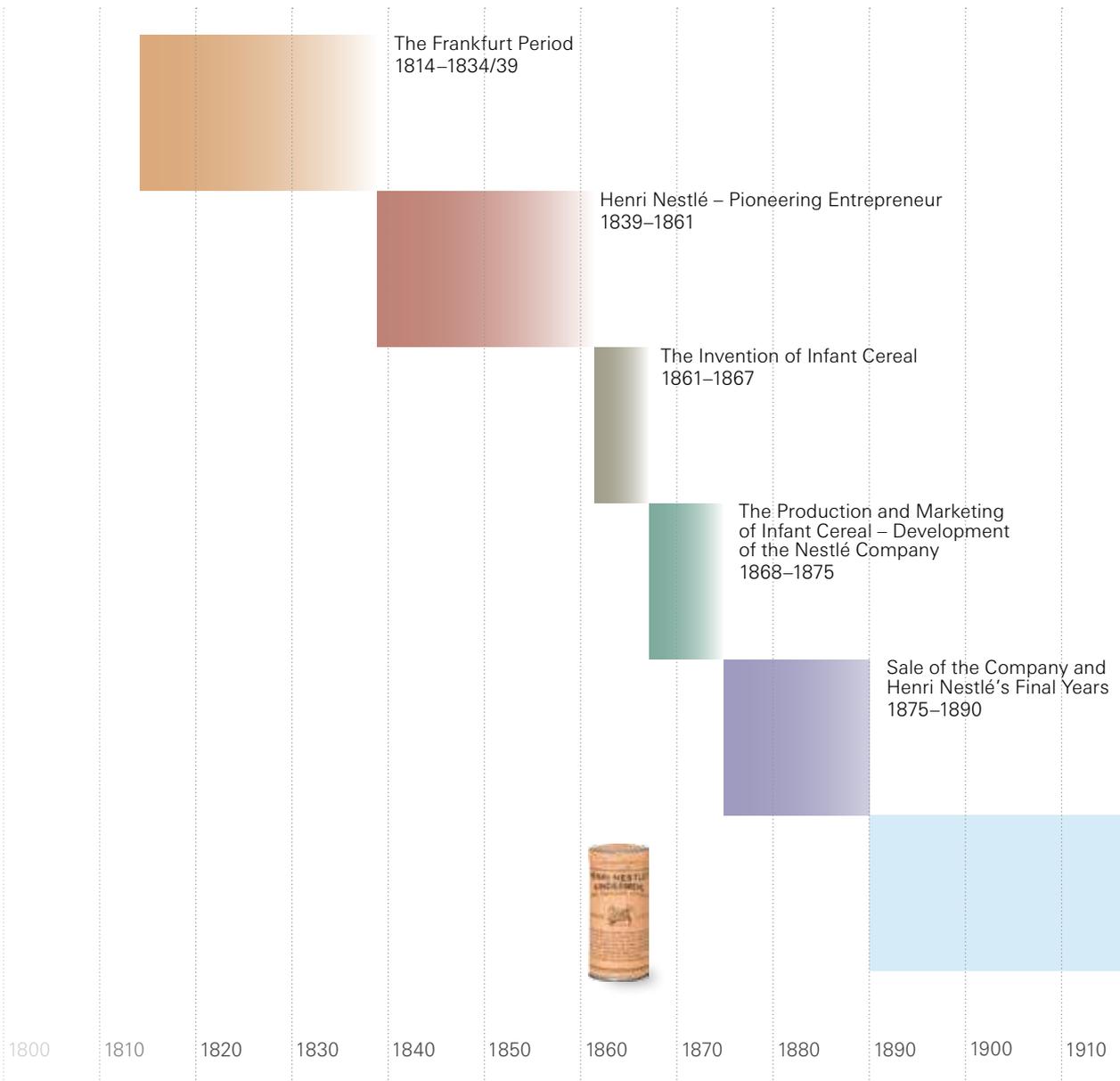
Over the past few years, various Nestlé initiatives have also focused increasingly on the area in which the company has its origins: food for babies and infants. The company launched the “Breast is Best” campaign worldwide to promote breastfeeding; the “Start Healthy – Stay Healthy” campaign, which focuses in particular on the nutritional needs of a child in its first 1 000 days of life; and the “Nestlé Healthy Kids” education programme, in which more than 6 million children aged between 3 and 12 years have taken part all over the world.

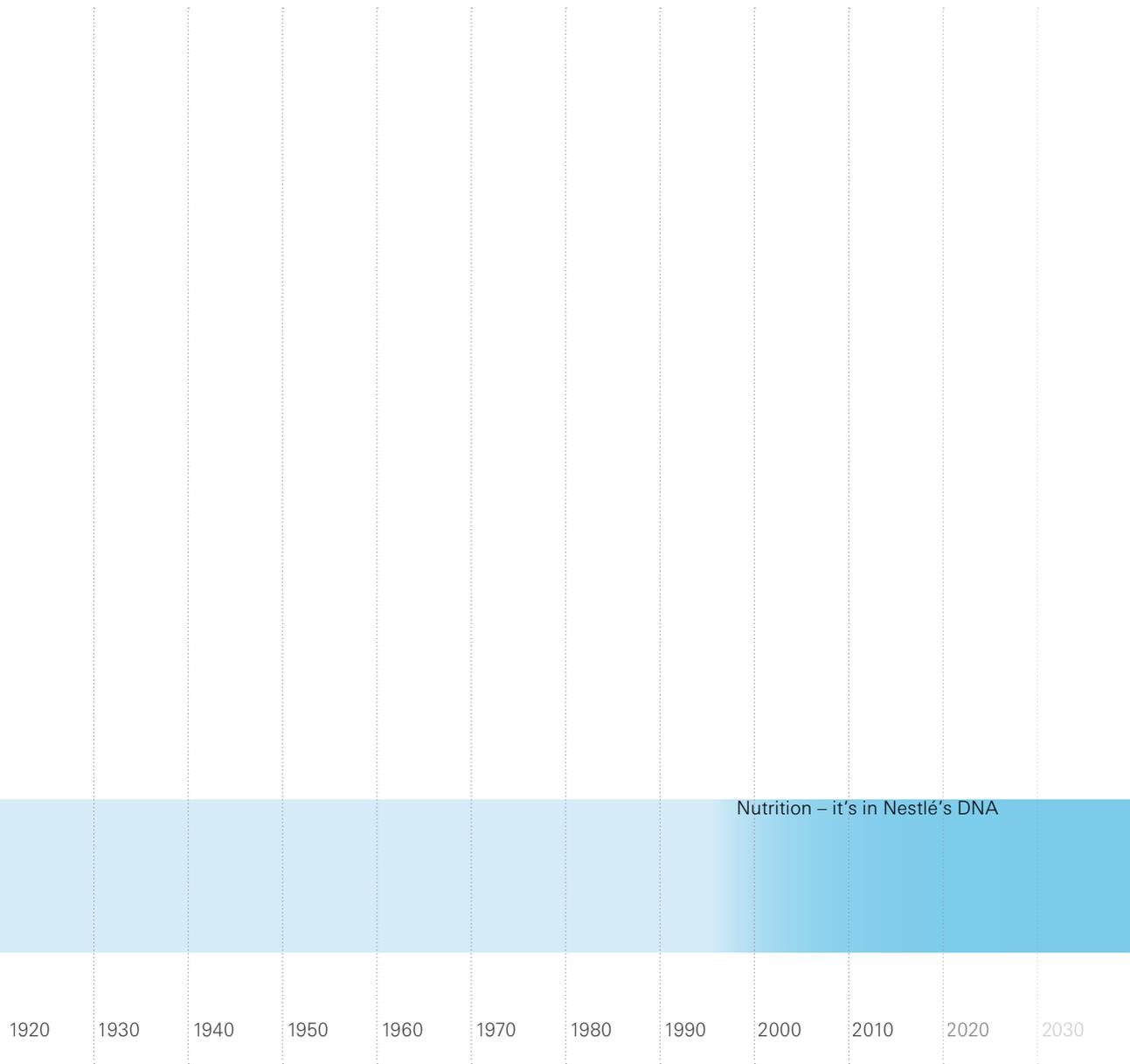
All the measures mentioned in the area of nutrition, from research to the finished product and its marketing, are monitored and driven forward by an NHW board called “Nestlé in Society”, which is led by Nestlé CEO, Paul Bulcke and that meets four times a year.

As we have seen, nutrition has always formed an integral part of Nestlé’s history and product portfolio – which is why our CEO rightly said that it is in the company’s DNA.



## Periods of Henri Nestlé's Life







# The Frankfurt Period

1814–1834/39

## Childhood and youth in Frankfurt am Main

The Nestle family originally came from Sulz on the Neckar in Württemberg, Germany. Most of Heinrich Nestle's forebears were glaziers. In the local parish registers the name is written in a variety of ways – Nüstlin, Nüstlen, Nestlin and Nestlen. It was not until Heinrich's grandfather Johann Ulrich (1728–1816) moved to Frankfurt am Main in 1755 that "Nestle" ("little nest") became the accepted family spelling. After settling in Switzerland, Heinrich gave the name a French accent, writing it as Nestlé, the form henceforth used in Switzerland, and changed Heinrich into Henri.

Grandfather Johann Ulrich's marriage to the wealthy widow of a Frankfurt master glazier opened the road to the status of a Frankfurt "burgher", which raised him to a higher rank in society. After the usual formalities, his application was granted. Now nothing stood in the way of the Nestles' rise in Frankfurt merchant and social circles. After the early death of his first wife, grandfather Nestle married her sister Catharina Elisabeth Arnold. This second marriage produced two sons, who made a place for themselves in the Frankfurt upper middle classes, or bourgeoisie, through skilful marriages and business know-how.

As the firstborn, Heinrich's father Johann Ulrich Matthias (1776–1838) followed tradition by becoming a glazier and took over the family business in Töngesgasse. It was the custom to marry within



Frankfurt am Main. Nestle's birthplace at the corner of Hasengasse and Töngesgasse (c. 1900).

your defined social circle and even in the same line of business. And his bride, Anna Maria Catharina Ehemann (1779–1839), did in fact also come from a Frankfurt master glazier's family. The similarity of the couple's social backgrounds is important because at the time class still largely determined lifestyle. Class dictated the choice of spouse, children's education and religion.

In 1804, the younger brother Johann Tobias (1777–1834) bought a large haberdashery and yarn business from J.P. Steg in the house called "Zur Goldenen Zange". The wholesale trade in buttons and ribbons, lace and thread brought him and his children a substantial fortune, which was to benefit their nephew and cousin Heinrich in the form of generous loans for his business projects. Johann Tobias was married to Anna Dorothea Andreae (1778–1845), the daughter of a prominent, wealthy dye merchant and a relative of Germany's national poet and playwright Gøethe (1749–1832).

Heinrich Nestle was born in his parents' home at 33 Töngesgasse at 3.30 p.m. on 10 August 1814. He was the eleventh of fourteen children. Soon after his birth his father gave up the traditional family trade of glazier to deal in window glass, bottles and English pottery products. He supplemented his income by working as an agent for the Paris General Insurance Company. As dynamic merchants spearheaded the city's economy, this new departure signalled a shift in his father's life towards the new entrepreneurial spirit with its greater willingness to take risks. However, Heinrich seems to have inherited not just his father's commercial prowess but also a feeling for the combination of artisan-type production and small business in which he had started out. When Heinrich, as a pharmacist's assistant in Switzerland, wanted to get ahead but was virtually debarred from opening a pharmacy of his own, he reverted to the go-getting approach he knew from his father, developing business and production skills and expanding his knowledge of both fields as he went along.

## Death of Heinrich's brothers and sisters, religion, technical innovations

Of the fourteen children – seven girls and seven boys – born to Heinrich's mother over a period of 21 years, half died before adulthood. Only three of the survivors later married: two girls, who both had children of their own, and Heinrich. As they were childless, he and his wife had that much more affection to lavish on other people's children.

By the time Heinrich was born, five of his brothers and sisters were already in their graves. It is often thought that, as a result, Nestle made it his life's work to fight the high infant mortality of the times, leading to his invention of infant cereal. This is unlikely to have been the case, however. There is no such direct link between the death of half of Heinrich's family and his invention of infant cereal. Nestle's interest in baby food was decades away. What's more, the children did not actually die in infancy. They were victims less of malnutrition or gastrointestinal infections than of contagious diseases such as diphtheria, scarlet fever, measles and whooping cough. Moreover, when he made his invention Nestle was not looking for a cure but trying to improve the state of infant nutrition.

It is not known what other contacts Nestle had with infant and child mortality during his childhood and youth. Though his parents did not belong to the educated bourgeoisie in which close, concerned parent-child relations first made their mark, the Nestle children did benefit from the rising tide of education, and some of the prevailing attitudes in educated circles rubbed off on them. Obviously this does not automatically mean that Heinrich was aware of the high level of infant mortality, but he would have been aware of the issues that were being debated in these circles and which, from the 1860s and 1870s onwards, increasingly included high infant mortality.

Like the vast majority of the Frankfurt bourgeoisie, the Nestles were Lutherans. Heinrich was baptized in his parents' faith eleven days after his birth. As was the custom at the time, he received both a Lutheran upbringing and a Lutheran education. His strictly down-to-earth rational approach to life, in which fulfilment lay in hard work to the limits of physical

**“There is no place for belief in modern science. What we do not know is a blank sheet which we must try to fill in.”**

Henri Nestlé 1875



The “Brücken-Apotheke” in Frankfurt am Main, the pharmacy where Nestle completed his apprenticeship.

endurance, surely reflects the Protestant ethic which was instilled in him at home and at school. However, his later years are not marked by any particular reverence for traditional values or a strict religious code. He kept his distance from churchly institutions, poking fun at “churchyards” and “parsons”. He ignored the unwritten rule which required a man to take his wife from the same denomination as himself by marrying a Catholic. Nestle’s move to Switzerland may well have reinforced these traits.

The young Nestle was also deeply influenced by two technical innovations in Frankfurt, which to his contemporaries symbolised the dawn of “modern times”: the construction of a municipal water system (1828–1834) and the introduction of gas lighting. Fountains had always been a focus of neighbourhood life, and there was one in the street outside Heinrich’s home where he used to play. Now, with water being piped right to the tops of houses, the fabric of society was being threatened by such changes.

The second event – the advent of gas lighting – was closely linked to the rise of the chemical industry. In 1828 an oil gas plant was built at the gates of Frankfurt. Soon several houses and streets were lit by gas, another development that made a strong impression on Nestle’s contemporaries. These events were to remain more than just “childhood memories”. In Switzerland, they spurred Heinrich’s active involvement in public lighting and water: the first thing Nestle did after buying a house in Vevey was to lay on a water supply, which he was careful to use economically; he also developed a form of liquid gas to improve street lighting and persuaded the town of Vevey to adopt it.

For lack of records we know next to nothing about Heinrich Nestle’s schooling. As a rule, his Frankfurt bourgeois contemporaries would receive private tuition before going on to a private school. They would then either attend the Gymnasium (secondary school, “grammar school”) between the ages of nine and eleven or take up an apprenticeship at about fifteen. If Heinrich, like his brother Gustav Edmund, actually went to the Gymnasium in the former Barfüsserkloster, he certainly did not stay to the end. Because even before his twentieth birthday in 1834 he had completed a four-year apprenticeship with J. E. Stein, owner until that year of a pharmacy (called “An der Brücke” and later renamed “Brücken-Apotheke”) at the corner of Fahrgasse and Brückenhof in Frankfurt. Heinrich presumably began his apprenticeship at fifteen or sixteen, the same age the sons of rich merchants started work. Besides Latin, Nestle later showed a sound knowledge of botany and chemistry. He could only have learnt these subjects – especially chemistry, a cornerstone of his later career – in a pharmacy, not at school.

## Move to Switzerland: historical background and personal motives

Long before chemistry became established as a separate scientific discipline in the universities, it was an essential part of every pharmacist's knowledge. Wherever possible, diligent pharmacists put the latest findings of chemistry to practical use in making up physicians' prescriptions and above all in concocting specialities of their own. At the beginning of the 19th century, chemistry was not yet a recognised branch of science at German universities.

A pharmacist's education was often not an academic course of training, which only became compulsory from the 1850s on. Even at the time Nestle did his apprenticeship, pharmaceutical and chemical knowledge was often dispensed by practising pharmacists. Training followed the method customary in any other trade, in which a young man was indentured to a master as an apprentice and then became a "journeyman": after completing his apprenticeship he would take to the road at home and abroad, often for several years, to round out his knowledge of his craft. It was only during the journeyman period, if at all, that trainees would attend pharmaceutical courses at a university.

Heinrich Nestle probably finished his pharmacist's apprenticeship in Frankfurt in 1833, and certainly not later than 1834. Little is known of Nestle's actions until he qualified as a pharmacist's assistant in Lausanne in November 1839. Before this he had worked with the pharmacist Marc Nicollier in Vevey. To this day we have no clear idea where and how he spent his early twenties or exactly when he left Germany.

He does not seem to have come straight to Vevey. When in 1860 he requested permission to keep his rights as a Frankfurt burgher his lawyer, a close acquaintance from his Frankfurt days, wrote to the Frankfurt Senate: "After [...] learning the pharmacist's art, he went abroad many years ago and later found a permanent home in Vevey on the Lake of Geneva."

Heinrich's application to take the necessary exams in Lausanne was supported by five certificates of employment. These show that he had had at least four different jobs in the pharmaceutical field during the five to six years following his apprenticeship. But why did he leave Frankfurt and Germany? Why settle in Switzerland, and in Switzerland why in the French speaking town of Vevey? Even if we cannot give any definite answers to these questions on the basis of the few known records, some intriguing conclusions can be drawn from Nestle's personal circumstances and the political and economic situation in Frankfurt.



The "Pharmacie Centrale" (c. 1900) in Vevey, where Nestlé worked as an assistant from 1839 to 1843.

### Three possibilities

First, was Heinrich Nestle a political refugee? Or was he what we would now call an economic refugee? Or – the third possibility – did he emigrate mainly for personal reasons?

Taking the political hypothesis first, the Bundestag, an assembly of the German Diet which met at the time in Frankfurt under the chairmanship of the Austrian chancellor Metternich, was doing its best to turn the clock back against liberal and nationalistic pressure. After the students' associations and universities, the circle of those suspected of revolutionary activities or links with the "Demagogues" movement only widened. Everywhere, social unrest or demands for civic liberties led to the use of police state methods against real or imagined opponents. Preventive

des Stud. pharmec. Nicollis und Vevey seit im Wintersemester  
1827 meine Anwesenheit über experimentelle Chemie beauftragt, und im  
Wintersemester 18<sup>27</sup>/<sub>28</sub> die praktische Übungen in chemischen  
Laboratorien beaufsichtigt. Als ich dies mit Anwesenheit des Jungers  
auf sein flüchtig gehaltenes und ungenügendes, und seiner  
Aufmerksamkeit unzureichend gesehen ist. Gießen im März 1828

Dr. Just. Liebig  
vor. öff. Professor der Chemie

editorial censorship was introduced instead of the widely hoped for press freedom. The nationalistic and freedom loving movements received a boost with the Paris revolution of July 1830. Popular discontent and growing opposition to the authorities were widely reflected in the mood at public festivals and the rise of political associations and assemblies. In 1833 radicals attempted to trigger a nationwide revolution with a coup against the Bundestag by storming the Frankfurt police barracks. The revolt failed.

The crackdown was severe. Many activists and sympathisers were arrested. Others escaped capture by fleeing to the liberal cantons of Switzerland. Political associations, gatherings and festive events were banned, and travellers and anyone who made themselves conspicuous were kept under police surveillance. This now included craft journeymen for whom, from 1835 to 1848, Switzerland was for the first time placed off limits. Throughout Switzerland, clubs and associations sprang up in which émigrés from craftsmen to intellectuals could enjoy the freedom of expression denied them in Germany. The German Confederation saw this as a threat. Some governments even ordered all their journeymen in Switzerland to return home, but with little success – most preferred the liberal spirit that prevailed in certain Swiss cantons to police state surveillance back home.

Nestle can hardly have been unaffected by the political situation in Germany when he came to Switzerland as a journeyman for good sometime between 1833/34 and 1839. The only question is whether there were any other motives strong enough to prompt his move despite the ban on freedom of movement or whether it was his political views that swayed the issue. Significantly, neither Heinrich nor his two brothers in Lyons returned home after their journeyman periods abroad.

As a pharmacist's apprentice, Heinrich Nestle was not yet subject to full police surveillance in the early 1830s as students were. He would only have attracted attention or risked punishment if he had been seriously involved with the liberal conclaves that took place just a few yards away from his place of apprenticeship. Though participation in these meetings cannot be entirely ruled out, at least he does not appear in police files of activists who were fined. But he certainly was closely associated, sometimes on a very personal level, with many committed Frankfurt liberals and their families. He kept up some of these contacts in Switzerland all his life. Both Heinrich's wife and the husband of his sister Wilhelmine Elise came from this background. Heinrich's subsequent father-in-law was questioned by the police in connection with the storming of the barracks, and some members of his family signed a protest against the curbs on freedom of the press in April 1832. As a result, the Nestle name figures on the same list cheek by jowl with those of radical liberals.

Someone like Heinrich Nestle, with liberal sympathies (which he did not try to hide later in his Swiss exile), was unlikely to wait for a summons from the authorities before heading for Switzerland or France to escape the clutches of the police in Germany. He did, after all, frequent liberal circles and saw friends and family jailed for signing a demand for freedom of the press. As a journeyman, he came under increasing suspicion and was deprived of his freedom of movement.

As regards the second possibility, the severe economic difficulties prevailing in Frankfurt from 1828 to 1836 are often cited as a motive for Nestle's emigration. However, there is unlikely to have been a lack of apprenticeships in pharmacy as the trade expanded from the 1820s onwards and restrictions on the number of journeymen were dropped. Furthermore earning a living was not a prime objective for Nestle. He did not have a family to support; his first priority was to complete his training.

We can therefore safely forget about economics as a key reason for Nestle's emigration. It is much more likely to account for his failure to return. But at the time in question (1842/43) trade and industry had already revived with the city's entry into the German Customs Union. If anything, economic conditions in the Swiss canton of Vaud would have argued in favour of Nestle's returning to Frankfurt. Apart from the fact that German journeymen found it difficult to integrate in Vaud, widespread poverty and the depressed state of the economy had little to offer new traders or craftsmen. The numerous unsuccessful attempts between 1832 and 1846 to open a new pharmacy in Lausanne show how difficult the situation could be, precisely for pharmacists. Against this, the liberal atmosphere in the canton of Vaud not only fashioned the political climate but gradually impinged on the economic field as well. In this respect, the situation in Vaud differed sharply from that of Frankfurt. It is not so much economics as the different politico-ideological climate that probably impelled Nestle to stay on in Vevey.

There remains the question of Nestle's personal situation. After completing his apprenticeship his main aim would have been to further his education, and this usually meant going abroad. Switzerland traditionally held a great attraction for German journeymen, including pharmacists' assistants. In their turn, many Swiss pharmacists had – like Marc Nicollier, Nestle's future mentor in Vevey – studied or worked as assistants in Germany. There were close professional and personal ties between pharmacists in Germany and Switzerland for both training and work, though it is impossible to say whether Nestle himself ended up with Nicollier through personal acquaintance or recommendation.

## The balance of evidence

Thus the definitive nature of Nestle's emigration and the difference in the political climates in Germany and the canton of Vaud point to political reasons for his actions, combined with the need to complete his education. Though Nestle was in Switzerland as an "ordinary" journeyman pharmacist's assistant and not as an actual political refugee, we can assume that like many of his like-minded compatriots he took the opportunity as an anti-monarchist liberal sympathiser to escape the repression in his home town.



# Henri Nestlé – Pioneering Entrepreneur

1839–1861

## Pharmacist's assistant in Vevey (1839–1843)

It was probably in November 1839, soon after his mother's death – his father had died the year before – that the 25 year-old Heinrich took the decision to stay on in Vevey. He may well have spent time there or in the region before. There are no records of him as a refugee or alien; he was just one of the many Germans who were in the canton of Vaud as journeymen, members of recognised "itinerant" professions or for some other reason. As such, he had to register with the authorities and was given a receipt and residence permit in exchange for his passport or journeyman's papers. This allowed him to take up local residence for as long as there were no complaints and provided he did not start up in business on his own.

This simplified residence procedure for craftsmen and members of travellers' families in subordinate occupations may partly explain why Nestlé did not take the master pharmacist's exam even though he had the necessary qualifications. Instead, he got a job as a pharmacist's assistant in Vevey and applied to sit for the cantonal health authority's examination. Unlike many other German-speaking pharmacists' assistants, Nestlé actually took the exam. He was apparently very keen to get himself accredited in the canton.

He sat the exam in Lausanne on 29 November 1839 with twelve other candidates. Besides the requisite three-year pharmacist's apprenticeship, Nestlé also submitted five testimonials for at least four practicals. His exam

results were varied. He received the highest mark, a 3 – “very good”, for the Latin translation of an article in the pharmacopoeia, only a 1 “quite good” in Botany, pointing to some gaps in his knowledge of plants, but a 2 “good” in Chemistry for his preparation of a sulphur compound and the write-up that went with it. All in all, the results added up to a good pass. Those who failed could only be taken on as “student pharmacists”, while Henri Nestlé was now officially authorised to do chemical experiments, make up prescriptions and sell medicines himself. “Henry Nestle”, as he is called in the files, was at pains to adapt in social and cultural terms as well as at work. His residence permit depended directly on his being accepted by the local community; any justifiable complaints about his behaviour, and he would lose it. There was therefore considerable pressure on him to conform. Changing the form of his name from “Heinrich Nestle” to “Henri Nestlé” was just one sign of an inner willingness to adapt.

A key figure in Nestlé’s acclimatisation process was without a doubt his employer, the pharmacist Marc Nicollier. He played a pivotal role in Nestlé’s advancement in two ways: firstly by showing him the ropes on the local pharmaceutical scene, and secondly by introducing him to the teachings and work methods of the distinguished German chemist Justus von Liebig. Besides keeping up with Liebig’s lecture material, Nestlé learnt about modern experimental research methods. It was predominantly thanks to this that he was able to reproduce some of Liebig’s published research findings (on infant nutrition among other things) and expand on them for his own purposes. Secondly, Nestlé’s relationship with Nicollier was all important in getting him settled down in Vevey. The pharmacist brokered the purchase by his assistant of a property with various items of machinery from his brother. But even more important was acceptance by association. As the close colleague of a respected local figure, he avoided arousing resentment as a “foreign body” on the local business scene and some of his employer’s reputation rubbed off on him.

## Purchase of a commercial property

“En Rouvenaz”, the property acquired by Nestlé on 6 February 1843 (later to become No. 17 Rue des Bosquets in Vevey) comprised a residential building with an attached oil mill, press and small sawmill, a distillery and warehouse, stables, sheds, a garden and meadows. Equipment included an oil press, a bone press, a veneering and moulding saw and a still.

The purchase price was 19 000 francs, 7 000 of which was payable immediately. For the remaining 12 000 francs Nestlé was able to take over

09.

DeWerra : Gustave, de St. Maurice, Valais. Aux H. Mamm, il a fait son apprentissage à Genève, pendant 3 ans, chez M. Bonnaville ; il produit un fort bon lait.

Dorbalot : Alexandre, de Nyon, cant. Romand. Romand à Nyon, et a fait son apprentissage, pendant 3 ans, chez M. Batten. Approuvé 30/11

Nestlé : Henry, de Frankfurt, Helv. chez M. Stöckli à Pevoy, il a fait son apprentissage à Frankfurt, chez M. Stein, pendant 3 ans ; il produit un fort bon lait.

Waleit : Aug<sup>e</sup> Friedrich, d'Ulmen, Württemberg, chez M. Hunsler à Pevoy, et a fait son apprentissage à Langnau, pendant 4 ans ; chez M. Guédelin. Certificats.

Brunner : Friedrich, de Hiesenhufen, Churgovie, chez M. Hunsler à Pevoy, et a fait son apprentissage à Hiesenhufen, pendant 3 ans, chez M. Brunner. Il ne produit pas de lait.

Tous ces Messieurs ont successivement examinés sur la langue latine, la Botanique, et la Chimie. Les notes sont appréciées comme suit.

Noms	Latin	Botanique	Chimie	Sujets	Chimie
<u>Hoëniq</u>	très bien, 3	assez bien, 1	très bien, 3	admis.	arsenic
<u>Freyss</u>	bien, 2	bien, 2	bien, 2	,	Amomiac
<u>Tägg</u>	bien, 2	assez bien, 1	bien, 2	,	Seser
<u>Livrat</u>	assez bien, 1	assez bien, 1	assez bien, 1	non	Charbon
<u>Hewer</u>	très bien, 3	bien, 2	très bien, 3	admis	Quire
<u>Schmick</u>	bien, 2	bien, 2	très bien, 3	admis	Taver
<u>Oberti</u>	assez bien, 1	assez bien, 1	assez bien, 1	non	antimoine
<u>Obermüller</u>	bien, 2	bien, 2	très bien, 3	admis	aide antique
<u>de Merz</u>	très bien, 3	assez bien, 1	très bien, 3	,	mercure
<u>Dorbalot</u>	assez bien, 1	mediocre, 0	bien, 2	non	aide Sulfurique
<u>Nestlé</u>	très bien, 3	assez bien, 1	bien, 2	admis	Sulfure
<u>Waleit</u>	bien, 2	assez bien, 1	très bien, 3	,	Chlore
<u>Brunner</u>	très bien, 3	très bien, 3	très bien, 3	,	Toxe.



Anna Dorothea Nestle-Andreae, Henri Nestlé's Aunt and his first financier.

the first mortgage obtained by the previous owner. Interest and capital repayments alone would cost him 2 480 francs in the first year. The real value of these amounts can be appreciated by comparing them with the annual salary of a Vevey secondary school teacher (1 400–1 700 francs) or the secretary of the local council (2 000 francs) at the time.

Before Henri Nestlé could think about how he was going to find the money for the annual interest and capital repayments, he had to raise the 7 000 francs to be paid in cash. He turned to his aunt Anna Dorothea Nestle-Andreae, widowed and living in Frankfurt. Born into a wealthy merchant family, Anna Dorothea possessed additional financial assets from her late husband's haberdashery business. After obtaining the necessary official authorisation she lent Henri the sum of 8 727.27 francs. The loan was secured by a second mortgage on the newly acquired property. Anna Dorothea granted Nicollier power of attorney to represent her before the notary in issuing a land charge note on her nephew in Vevey. Thanks to his family connections with these wealthy Frankfurt merchants, Nestlé managed to obtain the necessary capital not just to buy the property but also to finance his operating expenses and his first investments. His adventure as an independent entrepreneur and merchant in Vevey was about to begin.

## Merchant, chemist and inventor (1843–1861)

The business Nestlé bought in 1843 was one of the most progressive and versatile in the region at the time. It lay on the Monneresse Canal where the wild waters of the Veveyse had been harnessed since the Middle Ages to drive a variety of mills. Previous owners used the water power to operate an oil mill, a bone press for making bone meal fertiliser and a sawmill. Fruit brandies and vinegar were also produced. Nestlé relied entirely on water power and the existing production facilities. After all, in a year's time he had to find 829 francs interest and 2 000 francs for repayment of capital.

At first Nestlé stuck to the existing product range because the food "industry" was then one of the most thriving branches of the cantonal economy. He probably used the oil mill to make the rapeseed and nut oils customarily used at the time to fuel oil lamps. In the distillery he made liqueurs, rum and absinth. Spirits were used in the manufacture of vinegar, which Nestlé also sold. Furthermore his property backed onto some large vineyards, opening up the possibility of producing vinegar from poor quality wine. The existing press was used to turn bones into fertiliser. But Nestlé did not confine himself to his predecessor's product range.

He seems only to have kept existing production going in order to stay afloat financially; for the future he had other goals. He had bought En Rouvenaz with a specific project in mind, which he now meant to turn into reality. The sale was barely signed and sealed before he had piped water laid on to his property to make mineral water and lemonade: a building permit was signed by the Vevey municipal authorities on 12 May 1843. He was charged 20 batzen a month, or 24 (old) francs a year, for water.

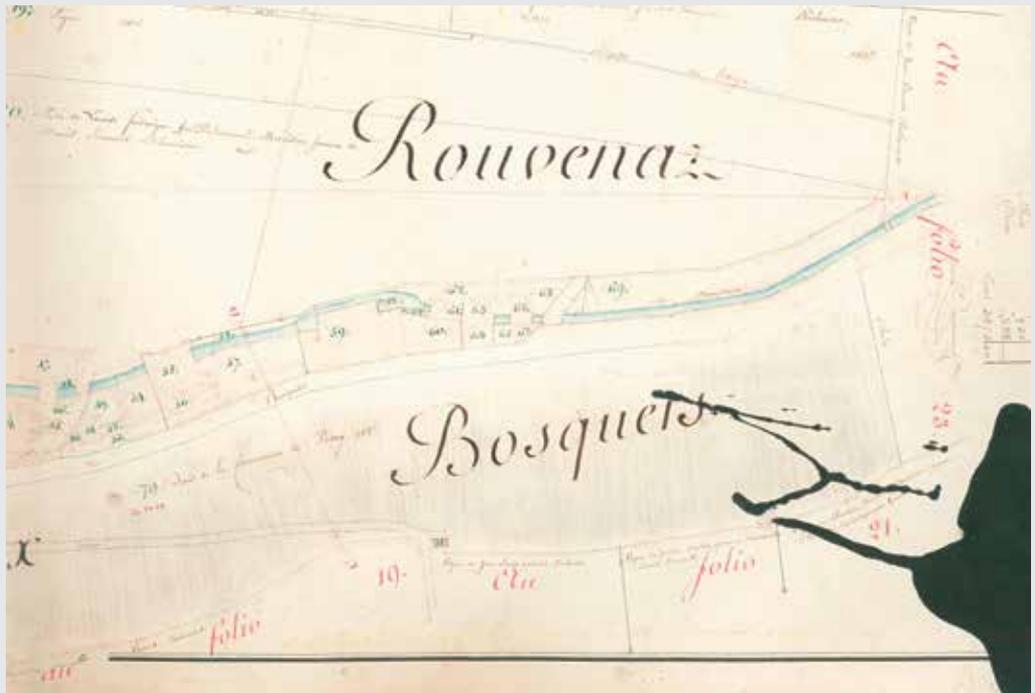
## Expanded product range: mineral water, lemonade, white lead

Nestlé began manufacturing and selling still and carbonated mineral waters as well as carbonated lemonade. While production of “artificial” mineral water was already quite common in the 1840s, no record has yet been found of lemonade production before this time in Switzerland. Nestlé thus seems to have pioneered the manufacture of flavoured soft drinks in Switzerland on a craft basis. “Fizzy” lemonade was first made industrially in Germany shortly before. Nestlé supplied flavoured and plain soft drinks as well as a variety of fruit brandies to the region’s inns. Purchasers paid a deposit on the bottles, which Nestlé took back for refilling.

Nestlé turned his attentions to other products besides oil, vinegar and bone fertiliser. A printed invoice from 1845 promotes his “white lead” mineral paint. No details of the production method have come down to us. Necessary raw materials included various minerals, oxidised lead and possibly small quantities of oil, all of which Nestlé already used for other products.

In the 1840s, Nestlé expanded his mineral water and lemonade production. One of his posters stars his “Mineral Water and Carbonated Lemonade Factory”. He added mustard powder and mustard paste to his existing product range of oil and vinegar. Steam heating was installed in the oil mill, and he began calling the bone press a “pulverisation mill”. The old sawmill was reactivated.

Nestlé had fingers in many pies besides manufacturing and sales. As early as February 1845, he was giving his occupation as merchant and chemist. This probably resulted from his activities in mineral water manufacture, drinking water analysis and the enrichment of water with a variety of minerals and gases. His model was Liebig, who had been closely involved with mineral water on several occasions during the years 1836–1843 and had published various articles on the subject. Liebig’s research on growth conditions in plants finally spurred Nestlé to experiment with



Extract from the cadastral map (1849) showing the quarters called “Bosquets” or “En Rouvenaz” in Vevey where Nestlé acquired his property in 1843.  
 Right: Nestlé’s application to acquire the “En Rouvenaz” property (1843).

3249.



Vevey le 20<sup>e</sup>. Janvier 1843.

Messieurs les Conseillers d'Etat, Membres  
Du Département de Justice et Police :

Au nom de Monsieur G. Henri Nestlé,  
natif de Francfort s/M., demeurant à  
Vevey, depuis plusieurs années, j'ai  
l'honneur de vous demander par la  
présente requête la permission qui lui  
est nécessaire pour pouvoir acquérir  
de Monsieur François Nicollier un  
Immeuble lieu dit en Rouvenar, Territoire  
de Vevey, consistant en maison, huilerie, piloir,  
sicc., distillerie, remise, hangar, fenil,  
écurie, jardin & autres dépendances pour  
le prix de dix neuf mille francs, y compris  
des objets mobiliers. —

Veuillez agréer, Messieurs les Conseillers  
d'Etat membres du Département, l'assurance  
de mon dévouement respectueux.

G. H. Nestlé

		<b>HENRI NESTLÉ</b>			
		en Rouvenaz.			
		Monsieur Ch. Seiler - Mon - Ville		DOIT.	
		Vevey, le		1845	
				FRANCS.	RAP.
1248					
Hors	30	12 1/2	bouteilles Limonade 227, 1.90		
		12 1/2	" " " " " " " " " "		
		100	Amor. th. v. d.	13.	19.20
Hors	13	6 1/2	bouteilles Eau de Seltz 147		1.05
"	23	6 1/2	" " " " " " " " " "		1.05
"	26	6 1/2	" " " " " " " " " "		1.05
Summe	4	1	2		1.20
	9	6 1/2	" " " " " " " " " "		
		12	" " " " " " " " " "		4.35
"	21	24 1/2	Eau de Seltz 157		4.20
"	18	6 1/2	Limonade 227, 1.90		
		12 1/2	" " " " " " " " " "		
		2	" " " " " " " " " "		7.05
			Summe		39.25
		33 1/2	bouteilles v. d.	15	4.95
		39 1/2	" " " " " " " " " "		5.90
			payé		22.40
			Henri Nestlé		

An invoice from Nestlé to Christian Seiler, innkeeper, for beverage supplies with a deduction for the return of the glass bottles (1845).  
 Right: Leaflet for Henri Nestlé's Company (c. 1846) and newspaper advertisements in the "Feuille d'Avis de Vevey" for its products (vine stakes and bone meal: March 1854; liquid gas: November 1862).

**HENRI NESTLÉ**  
Rue des bosquets N° 17.

**V E V E Y,**

**Fabrique d'Eaux minérales et Limonade gazeuse,**  
*Poudre d'os, Céruse, Vinaigre pur, Liqueurs,*  
**Moutarde en poudre fine à l'anglaise et en pâte.**  
Scie à placage, liteaux et lattes.  
**Moulin à huile avec chauffage à la vapeur.**  
Moulin à pulvérisation.

*On peut se procurer des billets d'avance chez M. Rossier, coiff.*

### Conservation des Echalats.

Les personnes qui se proposent d'employer ce printemps des échals préparés par un procédé chimique dont le succès est constaté par plusieurs années d'expériences, sont priées de me faire connaître la quantité qu'elles en désirent, afin que je puisse me mettre en mesure de satisfaire à toutes les demandes.

Henri NESTLÉ, à Vevey.

n en fait pas de dépôts; s'adresser à Vevey, rue de l'Hôtel-de-Ville, n° 1.

### POUDRE D'OS.

L'emploi de cet engrais sur les vignes devant chaque année plus fort, je préviens MM. les propriétaires de vignes qu'ils en trouveront en tous temps et en toute première qualité les quantités qu'ils me demanderont. Je m'empresse de donner tous les renseignements désirables sur la manière d'employer cet engrais si avantageusement connu par son efficacité, son transport facile et son bon marché.

Henri NESTLÉ.

### Chez Henri Nestlé

*rue des Bosquets, n° 17.*

### Gaz liquide ou gaz américain

PREMIÈRE QUALITÉ.

Un grand choix de lampes à gaz de tout genre, tubes, mèches etc. On trouve aussi chez lui des becs américains à mèches plates, qui peuvent s'adapter à toutes les lampes. Puis des petites lampes à 3 francs qui remplacent avantageusement les chandelles, elles donnent une clarté de plusieurs bougies en consommant pour un ou deux centimes par heure.

fertiliser mixes. In 1849 he built a small separate research unit, fitted out with a chemistry lab, equipment shed and warehouse. Clearly, earnings were already high enough for him to start ploughing back some money into the business as well as paying off his interest and capital.

Nestlé would certainly have needed extra labour to handle the production and delivery of his expanded product range, though we have no information about the size of the workforce. What we do know is that Nestlé's brother Wilhelm (Guillaume), his senior by two years, lived with him from 1844 to 1857 and helped him set up and run the business in Vevey. It would be interesting to know how the brothers divided up their responsibilities, but here again we are faced with a blank. Henri's brother, skilled in figures and who also described himself as a merchant, probably managed the financial and accounting side of the business.

Nestlé gave up mineral water production completely towards the end of the 1840s. We have no personal background information on this decision. Presumably sales had dropped off to such an extent that production was no longer worth his while. The depressed state of the economy during the crisis years 1845–1847, which dragged on into the fifties in rural areas, cannot have helped sales of what was then a luxury item. What is more, there are indications that, at the time, imported natural mineral waters from Germany were being enriched with carbon dioxide to improve their quality. But the key factor was probably the rise of an actual mineral water industry. Nestlé could not hope to compete with the specialised mineral water factories, which were often associated with breweries and shared their distribution networks. The stiffer competitive environment could only have underlined the disadvantages of a firm making a range of different products on the traditional small scale.

## Opportunities in lighting

With his mainstay gone, Nestlé was forced to develop new sources of income. Once again he turned for salvation to a novel, advanced, technically feasible yet more demanding product. Lighting was on everyone's mind at the time. Candles made from a wide range of materials were common in private homes. Rapeseed or cole seed oil, etc., provided a brighter light and a steady flame. But even in this light eyes tired quickly, and it was inadequate for many tasks. Main streets and squares were also illuminated by oil lamps. Maintenance was very costly because the lamps had to be cleaned and filled every day and lighted individually. It was not so much cheap oil production that interested Nestlé, himself an oil

manufacturer, as bringing about a general improvement in lighting fuels. He had seen the scope for improvements in lighting technology as a child in Frankfurt.

Vevey city council had been looking at ways of introducing gas lighting since 1845 because gas light was much brighter and steadier and the equipment was far cheaper to maintain than oil lamps. However, for the time being they had decided against building a gasworks and laying a gas network because of the high cost. This is where Nestlé saw his opportunity. If cities could have good gas lighting – and many now did – why shouldn't a small town? There must be cheaper ways of going about it. He set to work in his laboratory developing a lighting gas that could be transported without pipes. His efforts culminated in a form of liquid gas which, after 1852, he succeeded in selling in major quantities. Our knowledge of his production method is very sketchy. In view of the materials he was already working with at the time, we can assume that the product was based on bone and different varieties of oil.

It was some time before Vevey bought any of Nestlé's liquid gas. The town continued to use oil lamps for lighting, though gas was always on the agenda. In the mid-fifties the authorities changed their policy on the gas issue. Specifications for the construction of an oil gas plant were drawn up and a call for bids – aimed mainly at private firms – was published in numerous Swiss and foreign papers. However, in two months only 25 of the 150 copies of the specifications that were printed had been ordered. Henri Nestlé was one of the first to apply, and he was one of a handful of local firms that were interested in the project. Upon closer examination of the specs, interest in the project largely evaporated and only two bids were actually submitted.

Though Nestlé did not follow up this project, his interest in it paid off in other ways. He made two very useful business contacts in Jean Balthasar Schnetzler and François Monnerat. Schnetzler had started out as a teacher of biology, physics and geography at the Vevey secondary school before going on to lecture at the Académie de Lausanne, the forerunner of the university, in 1869, and was also Vevey city council's adviser on gas lighting. He was to be of great help to Nestlé at the time of his invention of infant cereal. Monnerat had a plaster and lime business in the area and was interested in the lighting project. Nestlé's friendship with Monnerat brought them together on construction projects in the 1860s.

Meanwhile, an interim solution was needed to tide the town over until the introduction of gas lighting, fed by a network of pipes from a gasworks. In August 1858 the council decided to buy twelve new street lamps capable of running on liquid gas. The project, covering the lamps, gas supplies and lamplighter services, was laid open to public competition as usual. This time Henri Nestlé bid for the gas supply contract – and won.



raient des comptes à régler de les faire acquitter d'ici au 1<sup>er</sup> janvier 1860.

### **Cercle du Léman.**

Les fournitures de gaz liquide et d'huile pour l'éclairage au *Cercle du Léman* pendant l'année 1860, sont à repourvoir. Les personnes qui désirent y prendre part sont invitées à déposer leur soumission cachetée, d'ici au 16 janvier, chez Charles Félix, économiste.

— La place de concierge desservant du Cercle du Léman à Vevey est vacante pour le 1<sup>er</sup> mars ou le 21

In the 1850's, Nestlé supplied the liquid gas to light the "Cercle du Léman" club (before 1916). This lakeside garden now houses the Alimenterium. Below: Re-tendering in the "Feuille d'Avis de Vevey" in January 1860. Right: An invoice from Henri Nestlé to the "Cercle du Léman" for the delivery of liquid gas (1859).

**E** Lampes à gaz  
 en tous genres  
 TUBES, MÉCHES, CISEAUX, ETC.

**FABRIQUE DE GAZ LIQUIDE**  
 ET  
**D'ENGRAIS ARTIFICIEL**  
**HENRI NESTLÉ**

Guano véritable  
 du Pérou  
 ENGRAIS AZOTÉ. POUDRE D'OS.

11 rue des Capucins, 17

Marché du Léman à Mérey Drix

Vevay, le 30 Juin 1859

Entrepreneur de Ch. F. Borel

1859. Avril	275 +	} 650 + Gaz liquide 70 / 455. --	
Mai	200 .		
Juin	175 .		
Avril 17		6 dans méch	1 - 6. -
		2 lampes compl. N° 3 pour le gaz de 4. 20.	18 - 36. -
Mai 8		nettoyé deux lampes - four. 1	1 - 75. -
	11.	6 dans méch	1 - 6. -
	16.	1 lampe complète N° 3 p. capuch touchet en fer	19. 50
		réparé deux lampes, change le méch	50
		2 grande capuchons platinés	4. -
26		6 dans méch	6. -
		nettoyé & réparé 2 lampes	40. -
Juin 6.		12 tubes	50. -
	25	6 dans méch	6. -
	17	1 bonte à lampe	45. -
	20	6 dans méch	6. -
		12 tubes	50. -
		à déduire	550. --
		pour les tubes	12. --
			540. --

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M. Nestlé



J.B. Schnetzler (1823–1896), a science teacher at the Vevey secondary school, was a source of inspiration to Nestlé in developing his infant cereal and assisted his successors in improving the product.

Before his contract with the town came into effect he was forced to look to his business affairs. In 1857 trade was crippled by a severe economic crisis, and in the autumn of the same year his brother Wilhelm left Vevey to work for an export firm in Neuchâtel. Henri looked for a strong financial partner to replace his brother. Guillaume Keppel, who had taken over the Pharmacie Centrale in Vevey from his old mentor Nicollier, appeared to fit the bill.

On 31 October 1857 Nestlé formed a general partnership with his seemingly successful, wealthy partner. The firm was registered under the name of Henri Nestlé, who had sole power of signature. Nestlé contributed buildings (valued at 36 000 francs) and some goods to the firm. While he was personally responsible for paying off the outstanding debts, the mortgage interest was to be paid by the firm in the future. Keppel was to contribute share capital of 20 000 francs over the course of a year. Profits were to be split between the two partners. If one died, the other would have the right to carry on the business alone. According to the ten year contract, the object of the company was the operation of the “En Rouvenaz” Nestlé factory and trade in artificial fertilisers and liquid gas.

The formation of the company did not affect its management and responsibilities, which remained firmly in Henri Nestlé’s hands. Keppel ran his pharmacies in Vevey and nearby Cully and saw his stake in Nestlé’s business mainly as a sound capital investment. The new financial assets gave Nestlé more flexibility. At the same time he introduced a successful new business strategy. He abandoned the production of liqueurs, vinegar, paint and mustard and concentrated on gas lighting and fertilisers, expanding the range of products in these two areas.

Increasingly active in lighting and fertilisers, Nestlé was delighted with Vevey’s decision to purchase twelve new liquid gas-fired street lamps. Together with the hitherto chief lamplighter, a plumber by the name of Rodolphe Schneeberger, he won an initial six month contract to supply the liquid gas and light the lamps each day. Schneeberger was responsible for the lighting and maintenance of the lamps, while Nestlé supplied the gas. The arrangement worked beautifully. The contracts were renewed automatically and Nestlé even managed to sell the town a few more lamps.

But the threat of a modern gasworks with a piped distribution network was ever present. Several Swiss towns already had full public gas lighting. In Vevey, the street lighting was inadequate. To improve the situation and fight off the business threat posed by the gasworks, Nestlé and Schneeberger decided to go on the offensive. On 1 March 1860 they submitted an offer to light the whole of Vevey with liquid gas. However the town council did not follow up the offer because a large gasworks was already in the offing. Just three years later, in early 1863, a brand new

plant with a piped distribution system came on line in Vevey and Nestlé's liquid gas went down the drain. Once more, he was forced to look for new sources of income.

Another problem was his partner, who from 1860 found himself in increasing financial straits. The best solution for both sides seemed to be to part company. This was done on 15 April 1861. Now not only had Nestlé lost a promising new line of business, he also had to find a new financier.



# The Invention of Infant Cereal

1861–1867

## The problem of infant nutrition

The spread of factories and large firms in the main industrial areas of Switzerland largely bypassed the food sector, where small businesses and craft-based production remained the rule in the 1860s. Millers, bakers, butchers and brewers made agricultural derivative products for a narrow regional market. Mass production was out of the question for perishable products with a short shelf life, and sales prospects were poor.

International trade, meaning for Switzerland above all imports, was largely restricted to unprocessed foodstuffs. In 1860 imports of livestock, cereals, pulses (peas, beans, etc.), rice and potatoes far exceeded exports, as did those of butter and flour. Cheese was one area in which Switzerland enjoyed an export surplus in processed products. The low level of Swiss derivatives exports (cheese aside) does not mean there were no attempts at innovation before the advent of condensed milk and milk and flour-based products. In the Vevey region alone, i.e. in Nestlé's immediate vicinity, several firms were involved in the processing and supra-regional distribution of foodstuffs in the 1850s.

It was not until the 1850s and 1860s that the trends and infrastructure developments underlying the rise of industrial production methods as a whole began to impinge on the food sector. Railways were beginning to provide a fast and cost-effective means of relatively long-distance transport for the generally highly perishable and inexpensive food products. The



Justus von Liebig  
(1803–1873).

quickening pace of migration from the land to industrial and service jobs in the expanding towns and cities, accompanied by increasing spending power, encouraged the emergence of new markets. New methods of food preservation, the introduction of machines, and advances in the food sciences of chemistry and medicine gave added impetus to developments.

In 1847, Justus von Liebig published a study *On the Components of Meat Juice* in an attempt to put his theoretical findings into practice. He gave women exact instructions on the best way to prepare meat and meat extract in accordance with scientific nutrition criteria. “Liebig’s Meat Extract” was a great success in Munich, where a leading pharmacy (the Hofapotheke) sold it as a tonic. As extracts were relatively expensive owing to the high price of meat in Europe, Liebig tried to get companies in Australia or Argentina interested in manufacturing meat extract. In 1862 the Hamburg engineer Georg Christian Gibert, who had spent many years in South America, took up the idea and with Liebig’s scientific help established several successful meat extract factories in South America. The Liebig’s Extract of Meat Company product was marketed in small bottles – the precursors of today’s familiar beef cube. The Liebig product and its many imitators were widely publicised in the press, including the Vevey official journal.

Liebig’s interest in human nutrition finally led him, via improvements in bread making, to develop a formula resembling as closely as possible mother’s milk. The immediate reason for Liebig’s interest in infant nutrition was the fact that two of his grandchildren could not be breastfed. As with meat extract, Liebig drew up detailed preparation instructions and published the results of his efforts in the German scientific journal *Annalen der Chemie und Pharmacie* in 1865. Two supplements to his Baby Soup appeared a year later. The subject attracted widespread attention, and manufacturing details appeared in numerous journals. Once again several firms turned to these publications to produce and market imitations of Liebig’s baby soup.

## Infant mortality

Infant mortality rose in most European countries during the 19th century up to the 1870s or even the 1880s and remained high till the end of the century. Fifteen to 25 per cent of infants died in their first year, according to country. A significant decline in the death rate only set in after 1900. With hindsight, it is possible to marshal a whole series of indicators to account for the high level and pattern of infant mortality: legitimacy or

illegitimacy, the country/town divide, parents' occupation, religion, family income, quality of housing, general conditions of hygiene and nutrition, to mention just a few. But then, as now, behind all the individual factors involved are the underlying relatively stable attitudes of different sectors of the population to sickness and health, life and death, which vary according to region, religion and class. We should be careful not to get carried away by the role of nutrition in infant mortality because of our special interest in the subject; nutrition is after all only one factor among many, even if it has a more direct impact than most.

Our interest here is above all in the conditions prevailing shortly before and during the few decades following the appearance of the first infant formula food produced on an industrial scale in the 1860s. A prime factor in infant mortality was whether a new-born child was breastfed or raised on one of the countless regional substitutes that had been used for generations – because the rule of thumb was, the more frequent the feeds, the lower the mortality rate. This was even truer in the 1860s when municipal water and drainage systems, food and personal hygiene were still far below the improved standards brought about thanks to state intervention towards the end of the 19th century.



*The Wet-nurse Agency* by Joseph Frappa. In the 19th century, mothers often reverted to wet-nurses if they could not or did not want to breastfeed their child.

## Reasons for the use of substitute foods

There can be no doubt that good quality breast milk is the best food for babies there is. This was stressed by writers of the times, as it had been for centuries. And yet there were plenty of reasons why a mother could or would not breastfeed her child on health or social grounds. Many mothers suffered from conditions that made nursing difficult or impossible. There was widespread ignorance about the transmission of diseases through mother's milk. In some sections of the population and even in medical circles, it was believed that even undesirable personality traits or mental states could be passed on in this way.

There were also numerous economic and social factors that prevented mothers nursing their babies. Many women employed in factories (and to a lesser extent those who worked at home) simply could not afford to take the time off work needed to nurse their infants in peace and quiet. Statistically, feeding frequency was substantially lower among mothers who worked away from their home, particularly among factory hands. In the upper classes, above all in cities and large towns, nursing one's own children had gone out of fashion to the point of contempt. It was convenience or fear of premature ageing

that kept these women from breastfeeding their babies. Even in the pre-industrial era there were whole regions where breastfeeding was practically unknown. In Munich as late as 1880, for example – after years of breastfeeding campaigns – less than 15 per cent of infants were breastfed! The pattern varied widely according to region and social class and was virtually unaffected by the recent rise of industrially manufactured surrogates, which accounted for a negligible share of processed foods. Social factors were also responsible for the large number of exposed babies. Many parents were too poor to feed their new-born children; others did not want to bring them up themselves out of shame (if they were illegitimate), with the result that countless new-born babies were abandoned and raised in orphanages or convents; and orphans too were dependent on substitute foods.

Wet nurses were engaged wherever possible, though the unsatisfactory state of affairs in the wet nurse trade and the old fears that not only diseases but also pernicious morals and character traits could be transmitted by breast milk led to the continued and sometimes even increased use of substitute foods for infants.

## Substitute foods

Almost any food eaten by adults in a given region might be used as a substitute for mother's or wet-nurse milk. The milk of various animals was especially popular. But animal milk is harder to digest for new-born babies, and the often poor hygienic conditions and frequent bacteriological contamination gave rise to a variety of nutritional problems and diseases, particularly in hot weather. Fresh, hygienically irreproachable full-cream milk was rare, especially in large towns. When in 1866 the Anglo-Swiss Condensed Milk Company in Cham in the canton of Zug put the first viable condensed milk onto the European market, it was snapped up as baby food because of its keeping capacity.

Most mothers who would or could not feed their babies on pure full-cream milk opted for a traditional mix of milk and flour. However, many doctors and scientists were adamantly opposed to cereals in any form, including baby food, even after the turn of the century. Nestlé's competitors cited the supposed indigestibility of baby food containing flour as an argument against his infant cereal. "Flour impairment" was to become quite a slogan, keeping the idea alive for decades until it was finally debunked by the knowledge that the problems were due not to the flour but to a one-sided diet lacking in other essential nutrients. All that

was necessary was to supplement the cereal with sufficient milk and other ingredients to provide the missing components (protein, fat, minerals and vitamins).

There was no lack of alternative sources of nutrition. The problem was which to choose – especially in view of the above average infant mortality rate among non-breastfed infants in the 19th century. The decision might seem to us to have been a critical and frightening one for the mother concerned. In actual fact, it was most likely a non-problem for a woman surrounded by the traditional social fabric of family, house and village. She benefited from the experience of her family and older women and girlfriends in the neighbourhood. A learning and “monitoring” system underpinned by family and village life ensured that certain traditions were passed on through the generations. Naturally, a mother would learn and apply most aspects of conventional wisdom concerning infant care and nutrition too.

The choice was harder for women who had not only moved from the country to one of the fast growing towns but who also went out to work. Outside influences such as income and the time available for looking after their babies loomed larger. This may have been one of the reasons why poorer sections of the population, which included most of the rural migrants in the second half of the 19th century, were the first to adopt the novel flour-based baby foods when their children were sick. By so doing they also avoided having to go to the doctor.

## The problems of infant nutrition and mortality

While the wealthy, educated upper classes were increasingly concerned about the care and upbringing of their children, in the middle of the 19th century the lower classes largely took high infant mortality, malnutrition and sickness itself for granted. They tended to see such matters as neither new nor unusual, and certainly not as something they could do anything about. People did not realise they could often influence the course of a disease or even prevent untimely death by modifying their behaviour. Convention dictated that there was little to be done, especially against diseases of infancy.

Despite this underlying fatalism, attempts were made to treat diseases – if a given condition was recognised as such. People would turn first to tried and tested household cures or to traditional remedies and those passed on by midwives or village healers from folklore and “old wives’ tales”. Only as a last resort would they go to a qualified doctor – usually



*Milkmaid* tin (end of the 19th century) of the Anglo-Swiss Condensed Milk Co. which launched the first condensed milk manufactured in Europe from Cham, Switzerland, in 1866 and which merged with Nestlé in 1905.



Henri Nestlé and his wife Clémentine Nestlé-Ehmant (1867).

Right: Promise of marriage between Henri Nestlé and Clémentine Ehmant (April 1860).

no 5. Le Juge de Paix du Cercle de Vevey  
 Nestlé et  
 Schmitt. a reçu ce jour à son audience, le promesse  
 de mariage entre

Henri Nestlé, originaire de Francfort  
 sur le Main, domicilié à Vevey, fils ma-  
 jeur (né le 10 août 1814) de Jean  
 Ulrich Nestlé et de Anna Catherine  
 née Schmitt, sa femme, tous deux de la  
 -des d'une part;

et  
 Anne Thérèse Clémentine Schmitt,  
 originaire du dit Francfort, y demou-  
 rant, fille majeure (née le 15 juil-  
 -let 1833) de Bernard Joseph Schmitt  
 et de Nepina née Bruchner, sa fem-  
 -me, d'autre part

Ces actes faits à  
 Vevey le 18 avril 1840. à 8 heures  
 de nuit en matin

G. Schmitt

Paulouy Henri Nestlé  
 Juge de Paix





In 1884, Julius Maggi launched a leguminous flour to enable the working classes to prepare with ease a favourable yet copious meal.

too late, as we know from the laments of physicians of the time. On the other hand, many doctors were forced to admit that the grandmothers and midwives knew more than they did about babies. It was not until the rise of health funds in the second half of the 19th century that the lower classes, like the urban bourgeoisie before them, began to accept doctors as experts in matters of health and sickness. This was to influence Nestlé in mapping out his marketing strategy and seeking to win doctors for his cause.

Doctors and statisticians had been pointing to the importance of breastfeeding and the disproportionate infant mortality rate for decades, and German universities were paying increasing attention to infant nutrition. Yet their findings failed to catch on. Resistance to change in the general public and among doctors themselves was not the only reason. Difficulties in turning scientific findings into appropriate forms of medicine, foods and therapies, compounded by the laggardly introduction of state and legal measures, also held back medical progress. Though governments were quick to learn about the existence of malnutrition and the different mortality rates in individual sections of the population, in Switzerland, for example, little was done about the problem before the early 1880s. It was not until 1882 that the Swiss federal factory inspector Fridolin Schuler recommended the systematic introduction of good quality food, whereupon Julius Maggi brought out the first ready-made soups on behalf of the Gemeinnützige Gesellschaft, a non-profit-making social service organisation. In Germany the first food law was enacted in 1879, but it was 15 to 25 years before the necessary provisions for the monitoring of food quality were finally put into place. Businessmen were quicker off the mark. One such was Georg Christian Gibert, who marketed meat extract on a large scale as a cheap and fortifying (medicinal) food in 1862 at the instigation of Justus von Liebig.

Henri Nestlé reacted in a similar manner to the now familiar problems of infant mortality and nutrition. He attacked the urgent need for processed food with the latest scientific findings in the best way he knew. He was deeply concerned by the fact that in parts of Germany one child in three died in its first year, while the figure for Geneva was only one in eight. In view of the reigning political inertia and widespread lack of action among many practising physicians, Nestlé's interest in infants and infant nutrition seems at first sight astonishing. He had never had anything to do with the subject before. He was as ignorant of the scope for innovation in this field as most of his contemporaries. Even as late as the early 1860s he was looking at quite different development opportunities for his company and had no overriding interest in baby food. The circumstances that finally led Nestlé to commit himself totally to this particular problem with all the financial and physical resources at his command are therefore of particular interest.

## Personal situation

At the beginning of 1860, Nestlé's economic situation in Vevey seemed sufficiently secure for him to think, at the respectable age of forty six, of marrying. Nothing is known about any earlier relationships with women. But now, within a short space of time, not one but two were to feature prominently in his life. And both were later actively involved in the development of the infant cereal business. He chose his wife – nineteen years his junior – from among his circle of acquaintances in Frankfurt. Anna Clémentine Therese Ehemant (1833–1900) – who called herself Clémentine Ehmant in Vevey – was the daughter of the Frankfurt burgher and doctor Bernhard Joseph Ehemant (1802–1867) and his wife Regina, née Bruckner, and a Catholic.

Henri and Clémentine were married in Frankfurt on 23 May 1860, after the bride had signed her promise of marriage before the justice of the peace in Vevey. The marriage gave Nestlé the opportunity to regularise his situation in Frankfurt, advancing to the status of "burgher", or member of the patrician class. At the same time he received official recognition as a chemist.

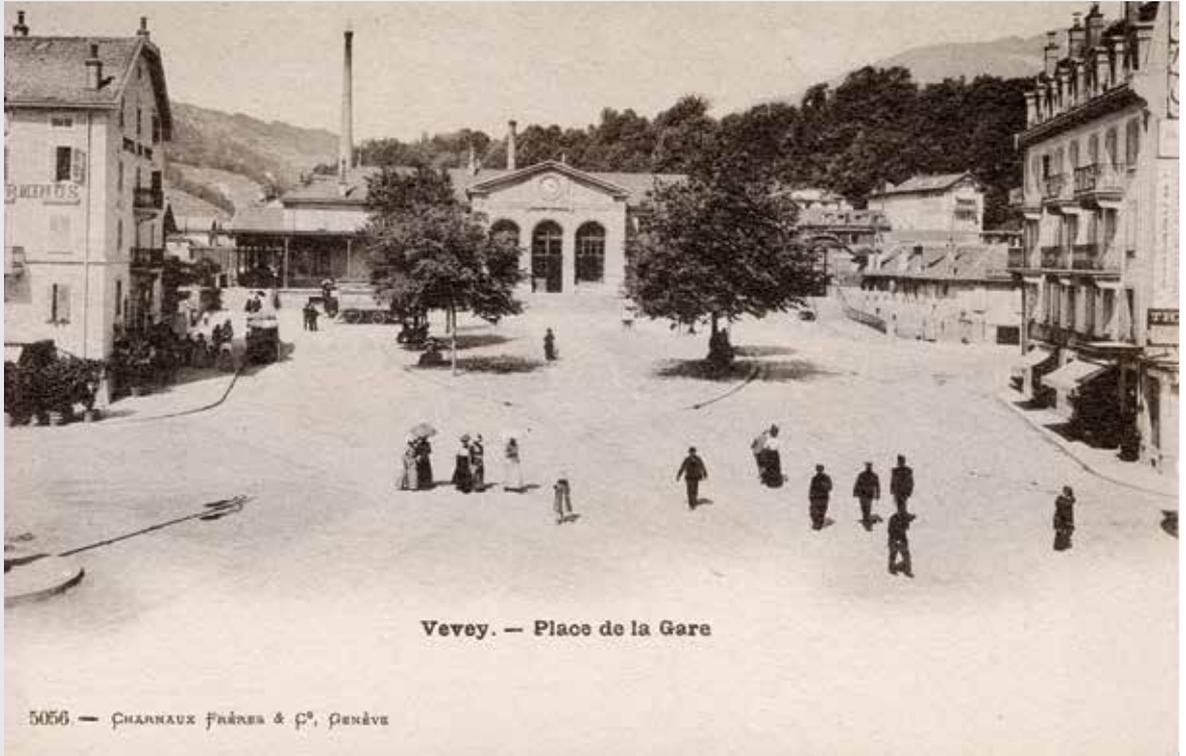
After a short stay in Frankfurt, he and his wife took up residence in Vevey. With her delicate features and somewhat melancholic air, Clémentine looks rather weak and fragile against Henri, who, in spite of his small stature (he was only 1.72 metres, or less than 5 feet 8 inches tall), makes a decidedly determined impression, with his short-cut brown beard, backcombed hair and grey blue eyes. Several of her letters do in fact refer to her health problems.

Clémentine's childlessness tormented her even more than her health. This is shown in her extravagant concern for the children of her friends, the firm's workers, and above all its customers. She has some arresting turns of phrase. In reference to the children raised on Nestlé infant cereal, she even speaks of "our kiddies" that she has saved – in a sense "adopting" them as her own. Nestlé infant cereal enabled her to sublimate her maternal instincts. The concern for those babies she herself raised on infant cereal seems to have been part of an acute need to give expression to a mother's loving care. Her dedication to the infant cereal project bore the hallmarks of an all-embracing mission going beyond merely helping her husband in his work.

It was for the same reasons that the Nestlés took into their care the orphan Emma Seiler, the second woman with a special place in Henri's life. Emma's father Christian Seiler (1808–1845), a Vevey innkeeper Nestlé supplied with beverages, died three months after his daughter's birth. She was to lose her mother six years later. It is not known when the girl came into the Nestlés' care. Henri first mentions her in his correspondence



The Vevey railway station built in 1862, rapidly became the reloading site for wine and industrial exports. Right: the chimneys of the Nestlé and Peter factories in the background show their proximity to the station. From 1889, the Nestlé factory was linked to the station by its own railway line. The Vevey-Chamby line inaugurated in 1902, facilitated the transport of milk and workers from the surrounding areas to the factory.



book in 1868, noting that his 23 year-old “daughter” was travelling for him in Switzerland, Germany and England to promote his infant cereal and establish contacts with buyers. She also regularly helped out in the factory. The multiple references to Emma as his “daughter” and his easy-going relationship with her and her children hint that the Nestlés had taken the orphan under their wing at a much younger age. Though Nestlé speaks in his will of his “adopted daughter Emma”, she is more likely to have been a foster child. All official documents call her by the name of her true parents, and nowhere is there any mention of actual adoption.

On 23 May 1872, her foster parents’ wedding anniversary, Emma married the widower E. Delajoux (1839–1926). She appears in the marriage register as “Seiler, called Nestlé”. The Nestlés quickly took Delajoux’s son by his first marriage to their hearts, and they were overjoyed when their “daughter” gave them “grandchildren”. Emma’s first child, born on 15 October 1873, was named Clémentine Henriette after her mother’s foster parents. This, like the choice of wedding day, was the greatest honour Emma could pay to them. Two other children followed.

The Nestlés expressed their attachment and sense of responsibility to their foster child in their wills. Henri’s notarised will reads: “I hereby bequeath all my goods and chattels to my wife Anna Clémentine Nestlé born Ehmant as sole heiress + by default to my adopted daughter Emma Delajoux born Seiler.” Clémentine Nestlé made the same provisions in the event of the premature death of her husband. As the sale of the factory in 1875 made the Nestlés millionaires, prospects for the orphan were nothing less than fabulous. But that was to reckon without the cruel hand of fate. Emma died before her foster parents at Crin near Montreux on 26 February 1882 at the age of 36. Henri and Clémentine Nestlé thereupon changed their wills, cutting out the Delajoux family altogether.

## Business finances

Nestlé’s marriage to the daughter of a Frankfurt burgher and doctor left him with an even greater obligation to provide for an adequate income, but his business prospects were clouded by the construction of the Vevey gasworks. However, Nestlé, the practical minded hands-on entrepreneur, seems to have inspired considerable confidence. It did not take him long to find a new local financial backer. On 1 May 1861, two weeks after his association with Keppel was wound up, Nestlé founded a limited partnership with Louis Auguste Bérengier. The object of the company revolved as before around the “En Rouvenaz” factory and the trade in artificial fertiliser and liquid gas.

His association with Bérengier helped Nestlé to further expand existing business and invest in new machinery, though his priorities reflected the changed outlook. He invested 7 000 francs in a new bone press, which could be used for crushing stones as well as bones and guano. He himself developed and built a machine for cutting liquorice sticks in standard lengths, ready for sale, which he marketed through pharmacies in the French-speaking part of Switzerland. In addition, he boosted the oil lamp business by developing an extensive network of depots. All in all Nestlé was now becoming better known for his trading activities, which extended far beyond Vevey and more than made up for the loss of the gas supply business. His taxable income of 4 000 francs in the 1865–67 tax period was 500 francs more than in the previous two-year period, giving him for the first time an income substantially higher than that of a secondary school teacher.

Despite these successes, he was not happy with the way things were going. Business was too uncertain and he was overly dependent on his financial backer. Furthermore, the lifetime of the company was limited to six years, meaning that by 1867 at the latest he would again have to find new sources of finance. Nestlé was now fifty. With his extensive

“For two years I have been looking into new ways of making artificial cement and cement blocks, all efforts have been crowned with success. My cement is as good as the best Portland, and I am sending you a sample of the blocks so that you can see for yourself. They are perfectly water and weather resistant.”

Henri Nestlé 1868



View of Vevey from Corseaux after 1870. On the right of the picture is the “Grand-Hôtel” (built in 1867), now the site of the Nestlé Corporate Headquarters at “En Bergère”. On the left, below St. Martin’s Church, are the Nestlé factories in “Les Bosquets”.  
Right: marketplace in Vevey on market day (c. 1890).



practical knowledge of chemistry and the machines and installations at his command, he cast around for a new product line. While still experimenting with new machines, manufacturing fertiliser, marble powder and yeast (for the distillery) and cultivating the lamp business, he continued to explore new avenues. One particularly promising line of business was construction, in which his friendship with a mining contractor called François Monnerat played a big part.

### **Nestlé and the construction industry (1866–1867)**

In 1824 an English mason by the name of Aspdin was looking for water-resistant binding agents when he discovered a way of making “artificial stone”. He called it Portland cement, after the appearance of the stone from Portland in Dorset. Portland cement, Roman cement and hydraulic lime from factories in England, France and Germany were threatening the livelihood of traditional plaster and lime firms in Switzerland. When in the 1850s large amounts of water-repellent lime and cement were needed for railway building, most of it had to be imported. The railways soon offered new means of transport for these heavy products, thereby further aggravating the position of conventional lime and gypsum mortar firms in Switzerland. One supplier affected by these developments was François Monnerat, who had a plaster and lime business in Villeneuve, near Vevey, and Grandchamp. Monnerat presented fertiliser, building plaster and a burnt hydraulic lime at the Olten building materials exhibition of 1865/66.

Nestlé and Monnerat had much in common. They were both involved in the fertiliser trade, worked in minerals and were interested in bringing gas lighting to Vevey in 1856, and they found their business interests converging. Nestlé had the necessary basic knowledge of chemistry which was increasingly important for the manufacture of modern binding agents. But above all he was looking for a new and promising product to manufacture on a large scale. Monnerat’s assets were some highly productive, conveniently located limestone and gypsum quarries, large kilns, and a circle of customers throughout the whole of western Switzerland. Vast amounts of binder were needed for the construction of the Lausanne–Vevey–Villeneuve railway line. The completion of the line in 1861, linking Vevey and Villeneuve to the European rail network, had two effects. It put an end to the railway as a customer and opened up new sales territories for competing products. We cannot be sure which of the two men – Nestlé or Monnerat – had the idea of getting together to construct Switzerland’s first Portland cement factory and producing ready-to-use

cement blocks on a large scale, though Nestlé seems to have been the driving force and, unlike Monnerat, was also prepared to go it alone.

In April 1866 François Monnerat and Henri Nestlé formed a company “by correspondence”, though the contents of their letters are not known. Nestlé, who was still bound to Bérengier by his company contract, now launched a new development programme to make Portland cement and ready-to-use cement blocks (which he called “compressed bricks”). He already had most of the equipment he needed. He could use the new bone press to break stones, he had his own furnace in which to burn the mixture, and a mill to grind it into powder. Eighteen months later he was ready to go. In his own words, he had found a new way of making the best Portland cement and a water and weatherproof cement block. However, in the autumn of 1867 the two men fell out when it came to scaling up for mass production. Monnerat withdrew because he lacked the money and, apparently, the will. Nestlé took the blow well, partly because he had another project up his sleeve that looked even more promising: infant cereal.

“Liebig first kindled the flame of truth about human nutrition. He also drew up the requirements for his infant paste. It is an excellent product but far too difficult to prepare, requiring as it does half an hour of complicated cookery. Furthermore, the mother had to obtain the finest quality flour, malt, milk, and potash, which is certainly no small task. [...] My product is prepared entirely on Liebig’s principles, only I reach the same goal by other means.”

Henri Nestlé 1868

## The development of infant cereal

Nestlé's breakthrough in infant cereal was not as simple and straightforward as it may look with the benefit of hindsight. The research and development phase alone, from the first glimmerings of an idea to production, lasted several years. It is impossible to say just when Nestlé started working on the project. His interest had been spurred by several factors – the high infant death rate in his own family, his background as a pharmacist's assistant, and Liebig's research – but the principal impetus came from his wife. She knew all about the high infant mortality rate and the pain and sorrow that came with it from her own roots as the daughter of a charity doctor. Nestlé's interest in this whole field had been heightened by his contacts with the pharmacists Nicollier and Keppel but above all by the scientist Schnetzler, who had long been involved with problems of nutrition. Together with his former business partner Keppel, who was also in financial difficulties, Nestlé started looking at prospects in baby food. Like the leading scientists of the day but unlike most of his contemporaries, Nestlé knew "that the malnutrition of children in their first years had a lot to do with the unusually high mortality rate."

He first thought of cow's milk as a substitute for mother's milk. Discussions at the Paris Academy on the influence of fodder on milk quality gave him the idea of making Swiss milk available to all children. Swiss milk enjoyed an excellent reputation everywhere. It was even credited with the low infant mortality rate prevalent in some parts of Switzerland. But good, pure cow's milk was hard to come by in Europe's cities. Here, Nestlé saw a market opportunity. However, the milk had to be processed because it did not keep well and was thought to be hard for babies to digest. Adding water and sugar improved the taste and digestibility.

The first baby food developed by Nestlé – by a method patented by Newton in 1835 – was a milk paste consisting simply of thickened milk and sugar. After bringing the product to production maturity, Nestlé was forced to admit that it was "not suitable" for daily use. It offered the desired keeping capacity, but the milk extract was not up to the latest scientific findings on infant nutrition. Liebig had thrown new light on processed infant food with his 1865 analysis of mother's milk and the development of infant soup (1865). With his respect for rational scientific thinking and research, Nestlé rejected the milk paste because it did not meet these criteria.

He may also have thought that "infant soup", with its influential promoter, dashed any hopes of making a go of his own project. While his partner Keppel went into milk paste production, Nestlé concentrated more on cement and building blocks, at least for the time being. Two factors

meut par des manifestations de gout plus que douteux. Attendons de plus amples renseignements.

— Nous lisons l'article suivant dans le journal *l'Événement* :

*Une découverte utile.* — Un chimiste suisse, M. Henri Nestlé, de Vevey, vient de faire une découverte des plus importantes qui va résoudre la grave question de l'alimentation des enfants en bas âge. Jusqu'ici les mères incapables de nourrir leurs enfants elles-mêmes étaient forcées de les confier à des étrangères; il en résultait une mortalité effrayante constatée par une solennelle discussion à l'Académie des sciences. On avait en vain cherché un palliatif; le biberon remplace mal le sein maternel. Sans doute le lait de vache sucré ressemble beaucoup à celui de la femme; mais il est extrêmement difficile dans les grandes villes de se procurer un lait pur et frais en raison du cahotement causé par le transport, de la fermentation et de la mauvaise nourriture des bestiaux en hiver. D'autre part, les combinaisons mises en usage jusqu'ici laissaient à désirer. Les meilleures mêmes ne contenant malheureusement pas d'azote, elles balonnent l'estomac sans nourrir.

M. Nestlé a eu l'idée heureuse de concentrer, par un procédé nouveau et très intelligent, le lait de vache des Alpes, dont la supériorité est reconnue. Il suffit de donner à cette concentration la quantité d'eau évaporée pour reconstituer un lait aussi frais que si l'on venait de le traire. Après avoir obtenu ce précieux résultat, l'inventeur a imaginé de cuire du pain de telle sorte que l'amidon en fut changé en dextrine et qu'il ne contient ni acide libre, ni levain. Ce pain et le lait concentré forment une farine qui, cuite à l'eau, contient dans les plus justes proportions tous les éléments plastiques et respiratoires, et qui nourrit fort bien l'enfant et se digère facilement. Désormais les mères pourront donc garder leurs enfants près d'elles, et le pharmacien le plus voisin fournira leur alimentation. Plus de nourrice, partant plus de mortalité disproportionnée. M. Henri Nestlé a bien mérité de l'humanité.

G. MEYLAN, ÉDITEUR RESP.

**Résumé des bêtes tuées à l'Abattoir communal de Vevey, du 6 au 12 juillet.**

“My invention is not a new discovery but a correct and rational application of substances long known to be the best for the feeding of children. The chief ingredients are quality milk, bread and sugar.”

Henri Nestlé 1868

caused him to change his mind and – like many others – take a closer look at infant formula food: the publication of the details of the composition of Liebig’s soups and their success, and their time-consuming and complicated method of preparation.

As already stated, Liebig’s soup put mother’s milk substitutes into a new category. Nestlé took its scientific composition as a model. His idea was to develop a product containing all the necessary ingredients in the right proportions, manufactured according to the latest state of scientific knowledge. There had never been such a milk-based product before, and it was precisely the difficulty in obtaining good quality cow’s milk that was one of the main obstacles in all infant food development projects. Nestlé pressed on regardless.

There is little reliable information about how and where he carried out the practical trials and how they went, and all the more legends; but it is fascinating to see how Nestlé combined contemporary scientific knowledge on nutrition with his own experience in a new product. He knew from Liebig that a surrogate for mother’s milk must be based on a highly specific mixture of cow’s milk and wheat flour and that the acid and starch in the flour had to be removed because it was difficult for babies to digest. He rejected Liebig’s complicated cooking instructions because he wanted to make the product as simple as possible. He was also faced with the problem of ensuring consistent quality and adequate keeping capacity under conditions of large-scale production. The problem lay not in the ingredients but in their specific individual processing.

He used top-grade Swiss milk in the form of the paste he had made before, adding sugar and reducing the mixture to the consistency of honey by condensing it under vacuum. He did not add the wheat flour in its raw form. Instead, drawing on the findings of J. A. Barral, a chemist working in Paris, he made it into a kind of rusk with specific properties in a special process of his own. He ground the rusks to a powder, mixed them with the concentrated milk, dried out the mixture completely at a constant temperature and added potassium bicarbonate. A further round of grinding and sieving, and the product was ready.

Nestlé realised that by adding calcium phosphates, ferruginous salts, meat extract and other components he could produce flours with highly specific properties for the sick or convalescent, and he subsequently went ahead with plans not only for an infant cereal but also for a special “tonic” version for people who needed building up. The special version was inspired by his wife’s sickly constitution, and he actually gave her some of his product to test its medicinal value. It worked well, and his wife’s improved state of health served to validate the iron-enriched tonic.

Nestlé had developed his formula in close cooperation with his friend Jean Balthasar Schnetzler, who had recently become a father for the first time. Schnetzler had already been involved in human nutrition and had held public lectures on the subject. The association of two men – one, Nestlé, an entrepreneur with a strong scientific bent, the other a scientist with a practical business mind – made possible an invention of which Nestlé enthused, “it is a discovery of major importance with an enormous future.” This combination of science, business and a high grade product set new standards for his company, which have been the guiding principles of Nestlé’s successors ever since.

Until now, no one knew exactly when Nestlé finalised his invention. The timing is important because different publications do not agree on which was the first child to be nourished with Nestlé’s infant cereal: “little Wanner” or Schnetzler’s son. Nestlé himself unequivocally gives the autumn of 1867 as the time of discovery, and this date is confirmed at various points in his correspondence and progress reports. This turns the spotlight on Schnetzler’s son, born in February 1867. Schnetzler may have been interested in a suitable form of nutrition for his child to supplement breast feeding or when it came to weaning. Whether Schnetzler turned to Nestlé or Nestlé approached him must remain an open question. Whatever the truth of the matter, the two men worked closely together.

The timing of the invention, Nestlé’s association with Schnetzler whose son was born on 27 February 1867, and the circumstances outlined above point to the 7–8 month old James Charles Louis Schnetzler as the first beneficiary of Nestlé’s infant cereal. But before Nestlé was able

to carry out any extended product tests on different children, fortune stepped in. One day, Schnetzler told him about a baby that had been born a month premature and could tolerate neither mother's milk nor any of the conventional substitutes. After two weeks of persistent vomiting, the child was so weak that he was already given up for lost. It was then that Schnetzler asked his friend to try to save the child with his new product. Nestlé took the baby home with him and bottle fed him with a strongly diluted version of his milk and flour mix. To general amazement, the infant took the food, started sleeping, and in a few days had recovered. A few months later Nestlé was calling him "little Wanner".

News of the child's salvation seems to have spread like wildfire among local mothers, midwives and doctors, because sales of Nestlé's infant cereal rocketed with scarcely any advertising. People may or may not have talked of a "miracle", as was later maintained, but there can be no doubt that Nestlé's infant cereal was soon basking in the aura of a "miracle product". Mothers from Vevey and the surrounding area flocked to Nestlé, not only to buy his product but also to see and marvel at the saved child. It was a reaction that speaks volumes about the lack of suitable foods and effective medicines for the diseases of infancy and the distrust of medical therapies. Doctors finally tested the infant cereal and gave it their accolade.

Even if the novelty of Nestlé's invention needs relativising, no other baby food really contained all the ingredients (including milk) and were so easy to prepare while meeting the scientific criteria of the day. Nestlé's triumph lay not in the idea itself but in putting that idea into practice, in bringing together a variety of different scientific findings – Barral's breadmaking, Newton's condensation of milk and Liebig's soups.

The instant and totally unexpected success of his infant cereal with a two-week-old baby eclipsed all Nestlé's other plans. The chance case of "little Wanner" opened up new applications at a stroke. The product was more comprehensive and versatile than its inventor had imagined. It could be used to feed babies several months old as well as new-borns. Suddenly he saw in his infant cereal a complete substitute for breast milk. He focused his entire energies and all his production facilities on the one product, and from the very beginning sought to maintain and defend a position of leadership. His surprise success with the two-week-old infant came at the beginning of October 1867. On 7 November he settled up with Bérengier for his other projects. The same month, he ended his association with Monnerat and pulled out of the cement and stone business altogether. By the end of the year he had ordered the necessary machinery for the "new business".

Nestlé was fired by the prospects but not dazzled by them. He was convinced that there was a huge demand for a ready-made baby food not only in Switzerland but all over Europe. He did not rush recklessly into large-scale production, but thought everything through very carefully, taking into account the following factors:

- the regional differences in infant mortality, which he thought he could reduce all round;
- mothers' negative experiences with wet nurses and the abdication of maternal responsibility their services often implied;
- the problem of obtaining good cow's milk, especially in large towns and cities;
- the urgent need for a rational, time-saving baby food;
- initial sales in Vevey, which surpassed all his expectations.

These various factors led Nestlé to conclude that his invention would find a ready market throughout Europe and America. With the success of Liebig's meat extract and baby soup before his eyes, he took the soberly calculated decision to focus large-scale production on just one product.



# The Production and Marketing of Infant Cereal – Development of the Nestlé Company

1868–1875

Nestlé's infant cereal was born. It had proved its worth. But the real test was still to come. Following Nestlé's decision to go ahead with the project, the challenge now was to set up an efficient production process and effective marketing system. He needed more machines, capital, raw materials and labour if he was to go into large-scale production. If he fell down on any of these requirements, the entire project was in jeopardy.

Marketing a single, novel, mass product faced Nestlé with a whole range of new and far-reaching decisions. What market should he aim at – regional, supra-regional, continental, or even worldwide? What were the best sales channels? Should he sell his product direct or through doctors, pharmacies and general stores? What terms should he offer middlemen? Was it best to sell the product in single packs, by the pound or by the kilo? Should he advertise it in sober, serious, scientific language or promote it in punchy breathless prose? What sort of packaging to use? What about the price? Today we know that a successful product launch depends largely on carefully coordinating these various factors in a synergetic marketing mix.

Once he had taken the decision to go ahead with specialised large-scale production, Nestlé was brought up against the limitations of an inventive, entrepreneurial, versatile manufacturer. It was at this point that he made the decisive switch from inventor and trailblazer, manufacturer and trader, to pioneering businessman.



One of the first tins of Nestlé's infant cereal.

## Financing

In 1867 Nestlé's personal assets consisted mainly of real estate. That year the factory, which he had bought for about 27 500 new francs of borrowed money in 1843, was worth 70 000 francs, though it was only encumbered up to an amount of some 30 000 francs. Nestlé's first step was to put up the property as security for further loans. He came to an advantageous arrangement with his partner and financier Béréngier. In 1867 Béréngier pulled out of the partnership, thereby renouncing his share in the profits, but left Nestlé the 25 000 francs hitherto invested in the business at a fixed rate of interest. A third mortgage was taken out on the property as security; the encumbrances now totalled just under 55 000 francs. These arrangements enabled Nestlé to avoid having to repay considerable sums at a time when he needed additional funds for his infant cereal production. But those funds still had to be found.

At this point Nestlé's main aim was to find a suitable associate again. With no eligible candidate in view he turned to his mother-in-law, who was willing to lend him the money for the first machines he had ordered before the end of 1867. The loan only covered the most urgent purchases but it saved him from financial adventures and possible heavy losses. In reality, sales of his infant cereal were not as strong as he hoped, despite his initial successes in Vevey.

After it emerged that he could finance step-by-step expansion with internally generated profits – albeit at the cost of a crushing personal workload and production bottlenecks – Nestlé never departed from the principle of self financing, observing it scrupulously until the company was sold. He continued to look for a partner, but only to take part of the strain. He turned down subsequent offers of financial support from private persons. When he was unable to meet rising demand because of limited production capacity, he increased the working hours. In the first five years, he ploughed all his hard-earned profits back into the business, either to finance expansion or to repay the mortgage debts. To begin with there was little sign of the quick seven figure profits he had thought to make.

When in early 1875 another expansion was pending that would have forced him to borrow on a large scale, Nestlé sold the business. By forming a company limited by shares, his successors that year laid the foundations for new financing methods which paved the way for major investments in new projects. Henri Nestlé himself balked at taking this step towards a modern and future-oriented method of capital procurement. Unlike for example the Anglo-Swiss Condensed Milk Company in Cham, a limited company established in 1866 with a nominal capital of 100 000 francs, he preferred the personal responsibility of an owner entrepreneur. Nestlé was

anything but “modern” in his financing methods; his approach was much more that of an old school industrialist.

## Production of infant cereal

Up until June 1868 Nestlé made his infant cereal on the old equipment. The steam heating, originally installed for quite different purposes, distillation equipment and copper boilers were adequate for small-scale production. Before 1867 was out, unable to meet major orders in one go, he ordered a variety of new machines and equipment in Geneva.

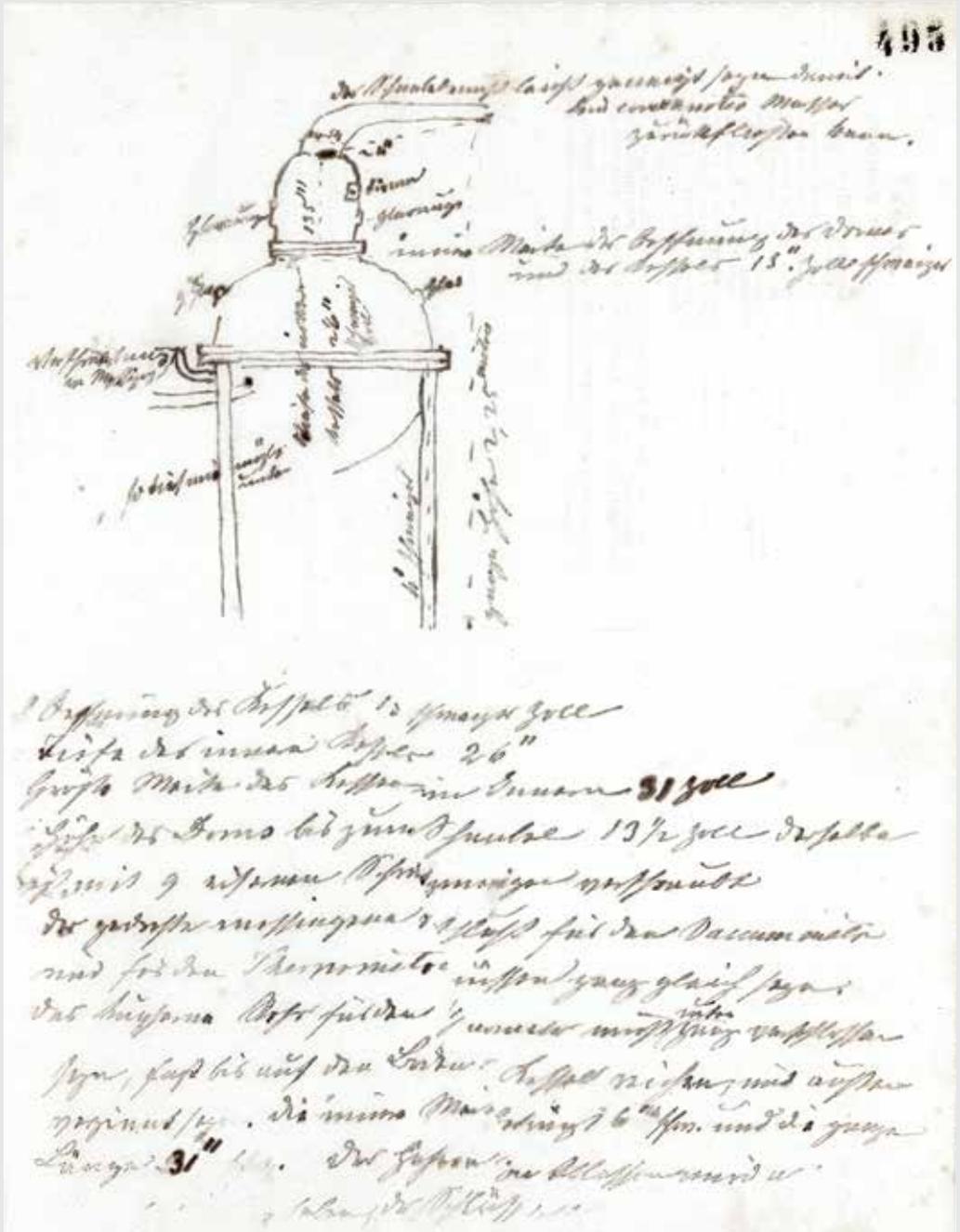
To prepare the milk extract Nestlé needed a vacuum installation consisting of a copper boiler in which to heat the milk and sugar mixture. A pneumatic pump helped the milk condensation process in the boiler by removing the steam and air from the boiler. During the process the sugared milk was exposed to a temperature of 50°C (122°F) until it was the consistency of honey.

To make the rusk bread, Nestlé mixed finest wheat flour with water to a dough. The dough was fed through a pair of steel cylinders and rolled out into a uniform slab one centimetre thick. The slab was then cut up, perforated by a wooden cylinder fitted with pins and baked in an oven under pressure. The finished rusks were then crushed between toothed rollers, ground in a mill and sieved.

For the mixing process, the powdered rusks were put in a tank in a 60°C (140°F) boiler water bath. A beam with four rakes stirred the flour continuously while the concentrated milk was slowly poured in. The milk and rusk powder mix was stirred until completely dry. Finally the necessary amount of potassium bicarbonate was added. After further grinding and sieving, the infant cereal was filled into round cartons, which were labelled and packed in boxes of fifty ready for shipment. The entire production process was geared to freshness: morning milk was processed and packed ready for shipment by evening. The aim was to preserve the quality of the milk and keep the product from spoiling prematurely.

Early in 1868 Nestlé went on a two-week business trip to Germany prospecting for better machines and equipment, because despite the introduction of night shifts he was hardly able to keep up with demand. For financial and delivery reasons, his production facilities lagged behind his development plans and marketing efforts. This was soon to change.

In Stuttgart Nestlé ordered a new vacuum unit. He had had plenty of experience in building his own machinery, but no longer had the time now. Instead, he gave the manufacturer highly detailed instructions. He decided



Nestlé's personal instructions for the design of the depicted milk condenser on the lower part of the next page (1870). Facing page, top: condensers some years later.



on a Perkins baking oven on the basis of technical drawings, and after extensive correspondence a Hamburg firm finally agreed to supply one. The reluctance was due to the fact that the equipment supplier was himself a rusk manufacturer and Nestlé was interested in the entire production process. However, Nestlé finally managed to allay the Hamburg firm's suspicions. The purchase of a powerful vacuum unit and oven brought a whole series of further investments in their wake, and the actual step to large-scale machine-based production was completed between April and July 1869.

Nestlé now had the technical facilities to make 500 kilograms (1 100 lb) of infant cereal a day, or 360 000 cartons a year. This was several times his previous production capacity, which came to 48 000 cartons in 1869. Yet as early as the autumn of 1872 he was forced to expand yet again, this time doubling his production capacity. One year later, even this was insufficient to meet spiralling demand. If he wanted to avoid seeing frustrated consumers turn to competing products, he had no alternative but to expand massively for a third time in only a few years. In December 1874, when he was toying with the idea of starting his own can-making operation to cope with the ever increasing demand for infant cereal, he was forced to admit that, this time, he was attempting too much. This was the background to Nestlé's decision to sell the company at the beginning of 1875.

## Raw materials

As a former manufacturer of bone meal, liqueurs, vinegar, mustard and liquid gas, Nestlé certainly did not lack experience in quantity and quality raw materials procurement, but mass production of a single product was another matter. It was not just that the raw materials themselves – milk, cereals, sugar and mineral salts – were new to him: the suppliers and procedures were also different. It was not possible to maintain stocks of milk because of its limited keeping capacity. Procurement and use had to be carefully synchronised. Continuity of supply, against a background of continuously rising demand, was of vital importance and supply and processing were intimately linked.

Swiss milk not only enjoyed an excellent reputation, but production too was increasing all the time. In procurement too, Nestlé's step-by-step approach to expansion proved better than a headlong plunge into mass production in the form of the "monster factory" he originally had in mind. He did not have to buy up large quantities of milk on the market all at once and had not contracted for any specific amounts. This was a distinct

advantage in his inexperienced state: the contemporary example of the Anglo-Swiss Condensed Milk Company in Cham showed that such a heavy start-up obligation could drive even a rich company to the verge of ruin. Nestlé established relations with suppliers slowly and built them up gradually.

Originally Nestlé bought his milk each morning according to the state of the order book, but by the summer of 1869 (i.e. after the expansion completed that year) this was no longer practicable. He now started to obtain his supplies from the milk collection centre at Roche, a small village in the Rhône valley 15 kilometres (9 miles) by rail from Vevey.

As late as 1875, supplies from a handful of dairies were adequate for his needs. Under Nestlé's successors, and especially with the start of condensed milk production in May 1878, milk requirements shot up. As growing demand led to a shortage in Vevey and could force the price up, the company stopped sourcing its milk from the immediate area. The firm equipped the milk collection centres with cooling tanks and encouraged the digging of wells and the installation of piped water on the farms to improve hygiene and cooling.

**“It is not enough to make the product, you also have to get it known and approved by doctors and the general public; you have to fight ingrained habits and prejudices, and that’s no small thing [...].”**

Henri Nestlé 1869



Arrival of fresh milk at the Nestlé factory in Vevey (c. 1900). The separate dairy was built in 1878.  
Right: Dairy around 1900. Processing of milk.





Top: Bakery (before 1889). The round dough mixers (right) and roller (left) were used to make the slabs of bread.

Below: The flour mill at Gilamont, Vevey, (1882) supplied Nestlé with flour.

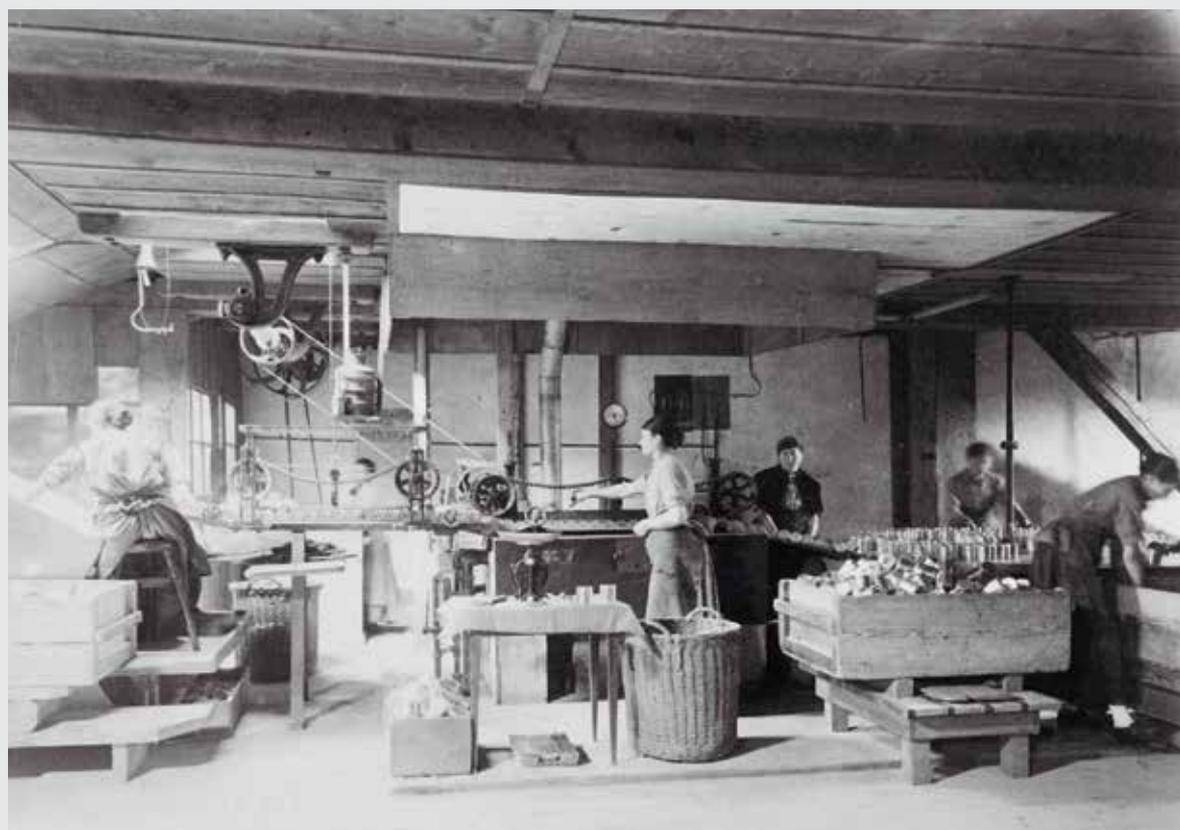
Its owner, P. S. Roussy, was one of the businessmen who acquired the Nestlé company in 1875.

Right: the bread ovens (before 1889) were used to cook the bread before being ground then mixed with condensed milk before being left to dry.





Tin factory. Right: Earliest production of tins (c. 1880). Below: Filling room for infant cereal (c. 1880).





Tin factory in Vevey (c. 1900) which supplied all Nestlé factories in Switzerland.





Packaging of infant cereal for transportation (c. 1880 and c. 1900).



Flour and sugar procurement was less of a problem, though here too it was a matter of finding dependable suppliers. The reliability of supply allowed Nestlé to dispense with large storage facilities, while still enabling him to cope with demand surges. From the very beginning Nestlé had only one flour supplier, Pierre-Samuel Roussy, a miller at Gilamont near Vevey, who supplied him with the finest quality flour once a week. Their customer/supplier contacts gradually developed into a relationship of trust until finally, in 1875, Roussy was well placed to take over the company.

After revamping his operations, Nestlé concentrated purely on the production of infant cereal and made none of the raw materials himself as he had done for his previous products. To fully appreciate just what a radical change in attitude and behaviour this represents, it should be remembered that he owned a mill, which had been in operation for years, and had produced phosphoric lime, which he could now only obtain with great difficulty. Naturally this would not have been possible without, among other things, the rise of specialised suppliers and suitable means of transport. Yet it is striking how he carried this change in thinking to its logical conclusion and in this area proved no stick-in-the-mud, as other small-scale manufacturers were.

## The people behind the scenes

Even though he was sole owner and managing director of the company and bore ultimate responsibility for all its activities, Nestlé did not have to do everything himself. He seems to have been aware from the start of the dangers of over-extending himself and saw that he could never build up and run the giant company he envisaged on his own. He therefore looked for a partner to take care of administration and sales, while he himself concentrated on the technical and production sides of the business.

Finding a suitable associate was not easy. The people he approached had other irons in the fire, and he did not want to take on board an unknown partner just for his commercial skills. He preferred to maintain his independence and freedom of action, putting up with the occasional financial squeezes, overwork and delays. He was therefore initially forced to take all the reins of development and management in all corporate areas into his own hands. It was not until the expansion of 1869 that he found someone to help him on the technical side and engaged a bookkeeper. Besides handling “scientific” matters, and in spite of himself, Nestlé became more and more involved in the commercial side, about which he

knew least and which – indicative of his new approach to active marketing – he called propaganda. This was to become his main sphere of activity.

Nestlé was only able to keep on top of things by bringing an enormous amount of personal energy to bear on a realistic expansion programme. Even so, he could never have made the transition to a large firm without the vigorous support of his wife and numerous relatives, friends and workers.

Clémentine Nestlé's contribution to the development of the infant cereal business was formidable. It went far beyond her role as wife and the indirect power and influence she exerted over her husband, important as these factors were. As the daughter of a charity doctor, a woman who yearned for children of her own and a close confidante of her husband, she not only shared in her husband's decisions but also influenced them. Henri valued his wife's advice highly. Thanks to her family connections with medical circles in Germany, Clémentine was directly instrumental in getting the infant cereal introduced there, and when Henri was looking for an agent in England she recommended her cousin "as a man of total integrity". Henri thereupon placed his main London warehouse in the hands of his wife's cousin and his partner. But Clémentine Nestlé's role went beyond such isolated contributions. She played an active part in the firm from the outset. Ten months after the start of infant cereal production, Nestlé, his wife Clémentine and a nephew were still the only people in the new firm.

Clémentine Nestlé had a hand in everything from raw materials procurement to the production of, initially, two to three dozen tins of infant cereal a day including packing and shipping, from dealing with the firm's voluminous correspondence to seeing to the concerns of mothers with babies. She kept up her activities as the firm expanded and showed no signs of withdrawing into private life. When her husband was there, her main duty was to oversee the factory's female employees. She was thoroughly informed about all aspects of the firm's operations and acted as his deputy when he was away on business, dealing competently with any problems that arose. Besides handling the correspondence on her own, she had sole responsibility for personnel management.

Clémentine Nestlé claims that she was readily accepted as her husband's deputy by workers of both sexes. She had herself so well organised that for a long time Nestlé could do without any other managerial staff. The man he did finally hire in May 1869 was more of an assistant than a partner.

By the time of the expansion (April to July 1869), it had become apparent that more staff were, however, needed, and as well as an associate to help him in technical matters he also engaged an accountant. Later, at the end of March 1873, he took on a mechanic. Extra labour was also needed. Men did the heavy work (handling the milk and flour arrivals,



Mois de Décembre 1870.

Boites en Caisse remplies	Boites en Carton expédies	Boites en blanc remplies	Boites en blanc expédies	Boites 54 en blanc remplies	Boites 54 en blanc expédies
5305	206	9	500		
569	2	16	1		
658	1236	17	6		
467	200				
524	51		507		
559	156				
395	250				
542	72				
	200				
9019	162				
	2				
	45				

19	224				
20	220				
21	550				
22	200				
23	200				
24	362				
26	348				
27	50				
28	112				
29	118				
31	54				
	5020				
	15				
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	507				
	5542				

Le Magasin  
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operating the condensers and ovens, and shipping) while women were mainly engaged in filling, packing and labelling.

We have no exact employment figures for this period. In December 1871 Madame Nestlé had three or four girls to help her in the factory, home and workers' quarters (see below). There were three to four times as many male employees. Between then and January 1874 the payroll rose to about thirty, rocketing to 325 by 1887 under Nestlé's successors.

For a long time factory work was looked down on and only attracted people from marginal social groups who found it even harder to adapt to such a regimented lifestyle than most. Dismissals were sometimes unavoidable but were never taken lightly. Disciplinary measures were necessary not just to keep up production and safeguard product quality but also to prevent damage to the machines.

Shared Christmas festivities and the provision of board and lodging helped to bind the workers to the firm. The Nestlés had originally engaged girls who lived in and whose duties covered both the home and the factory. These girls, who were under Madame Nestlé's wing, later formed the core of the Nestlé company's female workforce.

Nestlé workers were quite well paid in comparison with those in other branches of industry. In 1873 a woman earned 2.70 francs a day (less board and lodging), and a qualified mechanic twice that. In 1875–76 the average wage in the Nestlé company was about 3.85 francs per person per day. A day labourer received 3 francs. Comparisons are obviously difficult, but it is safe to say that these rates were certainly higher than in the cotton industry and most other sectors, though lower than in watchmaking. In 1875, the average pay at the Anglo-Swiss Condensed Milk Factory at Cham, a company engaged in the same line of business, was only 2.50 francs.

## The marketing of Nestlé infant cereal

Marketing rapidly became Nestlé's most pressing task, and his search for a partner to handle this entire field shows the particular importance he attached to it. For the lack of a suitable candidate, he took on the job himself. The first challenge was to open up and actively canvass his proposed markets.

## Product features – product range

The product usually determines the marketing mix. For example, the choice of distribution channels and sales outlets or the focus of the advertising campaign will depend on the type and nature of the product. Conversely, determining a product's characteristics in terms of customer needs is also an important marketing tool.

In Nestlé's case, maximum possible customer satisfaction depended on the following product features, which he subsequently emphasised in his publicity and which were an integral part of his success story.

- A full meal: Nestlé's infant cereal was a complete high grade alternative to breast milk. Mothers did not have to shop around for a basketful of different ingredients, and there was no need to add fresh milk.
- Quick and easy preparation: the product was simply boiled with water and was ready in a matter of minutes. Mothers – and anyone else for that matter – could prepare it almost instantly. No cooking skills were required.
- "Scientific" formulation and manufacture: the infant cereal was based on modern scientific findings. Nestlé also indicated that production, including hygiene control, was in the hands of a qualified chemist by adding the title "chemist" after his name on labels, leaflets and advertising material.
- Delicious taste: the product came in the form of a fine yellow powder with a sweetish rusk-like taste. As with Liebig's baby soup, usually one feed with Nestlé's cereal and nothing else would do.
- Versatility: the product was used as a remedy for nutrition problems as well as daily feeds for babies. Nestlé himself recommended it for infants up to the age of 15 to 18 months. The amount of powder per unit of water had to be varied according to the age of the child to give a consistency ranging from liquid to a paste for bottle or spoon feeding.

The first three product features (a full meal, quick and easy preparation, scientific formulation and manufacture) were objectives Nestlé had consciously pursued when developing his infant cereal. They became the mainstays of his marketing policy and he based his distribution system and publicity on them. The other two characteristics (taste and versatility) were bonuses which only showed up in practice. Nestlé was quick to turn these unexpected attributes to his advantage. In the light of his experience with "little Wanner", he promoted his invention not only as a supplementary or transitional food for weaning, as originally planned, but also as a suitable feed for virtual new-borns. Furthermore the sweet taste was a help in getting babies to eat his product and ensuring customer loyalty.

It was some time before Nestlé realised that his customers saw his product not just as a food but also as a remedy and were using it in the hope of increasing their children's chances of survival. It took him a year and a half to come round to his customers' point of view, whereupon he altered his strategy and began promoting his infant cereal as a remedy for diarrhoea too.

With the change in his perception of his product's function Nestlé also opted for a new distribution network. He started to channel sales mainly through pharmacies instead of grocers and other small retailers. Another reason for this move was to get the right balance in his marketing mix. Intent as he was on working in close cooperation with doctors, pharmacists seemed to him to be natural partners.

Nestlé did not discontinue his other lines of business at once when he took up infant cereal production in the autumn of 1867 but phased them out little by little over the following year. From the very beginning he marketed a special iron-enriched tonic version of the product for anaemics. Though he himself thought it was "great", it was not a great success. Being more of a medicinal product, it was subject to other legal restrictions and aimed at a different target group, so a new marketing strategy was needed. Nestlé had neither the time nor the energy to tackle this on his own. Even so, he kept the iron-enriched version in his product range until 1872, by which time he had come to realise that his efforts were getting nowhere. He henceforth concentrated on a single product – infant cereal. Expansion of the product range only came under Nestlé's successors with the start of condensed milk production in 1878 and the sale of chocolate in 1904.

## Distribution and sales system

In the space of seven years Nestlé managed to sell some 1.6 million cartons of infant cereal (including 670 000 in 1874 alone), all of it produced in Vevey, to customers in over 18 countries, without a pre-existing distribution and sales network. How did he do it?

He had failed to find anybody suitable to take over independent responsibility for sales and bring new money into the business, and he soon realised the impossibility of supplying customers direct from Vevey or of finding and cultivating retailers all over Europe. What he now wanted was an independent representative or agent for his infant cereal in each country to take the task off his hands. This implied that the product was going to reach the customers indirectly via one or more intermediate stages.

This was a basic turning point with important implications, because it meant that Nestlé no longer had the direct contact with his customers he enjoyed in Vevey. To begin with, he had to look for his retailers himself and cultivate them intensively. It was a long time before he partially delegated this task to the agents. This only became possible after he had developed other marketing tools (brand building, consumer advertising, sales promotion for retailers) to a certain level.

In Switzerland, Nestlé started direct sales in October 1867. Local people bought the infant cereal at his shop. Soon he was supplying it to one trusted pharmacy or small retailer in Vevey and each of the surrounding communities. On Nestlé's home ground, publicity worked by word of mouth where people did not know him personally. While he took care of the growing number of retailers in the French-speaking part of Switzerland as well as Berne, Basle and Zurich himself, he set up a general distribution centre for the whole of eastern Switzerland with a firm in Winterthur. When this company went out of business in 1869 Nestlé made it a principle to maintain all contacts with the individual retailers throughout Switzerland (some of them with sole territorial distribution rights) himself and to supply them all from Vevey. Switzerland became a sort of test market for Nestlé, but in the other countries he had to rely increasingly on the eyes and ears of agents and wholesalers for market information.

Nestlé's first foreign venture was in Germany (in January 1868), more precisely in his home town of Frankfurt. But despite help from numerous friends and relatives and although Nestlé was for ever singing the praises of his infant cereal, it proved impossible to find a suitable agent for this unknown product. He had to be glad to find any retailers to carry it at all.

As a result, Nestlé was forced to offer traders particularly attractive terms. To begin with he also preferred the idea of assigning sole sales rights to one dealer per town or even region. However, he soon discovered the flaw in this arrangement if a dealer failed to pull his weight. After a few months he therefore began – sometimes covertly, sometimes openly – appointing a second dealer in competition with the first if sales were slow or prices too high. Conversely, he would appoint successful traders who achieved above-average results and were willing to work exclusively for his product as wholesalers for larger regions, with responsibility for finding and supplying their own retailers. He knowingly accepted the territorial disputes with former sole representatives as part of the bargain and tried to soothe hurt feelings with gentle pressure or get his way with "Bismarckian cunning", as he himself put it. Whereas in Switzerland he changed from direct to indirect sales by bringing in retailers, in Germany he switched from a single-stage to a two-stage distribution system with both wholesalers and retailers. Despite his efforts to distribute his product mainly through wholesalers, he was unable to cut out existing direct contacts with retailers.

In France, Nestlé had more success with his idea of a single or at most a mere handful of independent main agents per country. France's centralistic structure helped. He also took more time before entering into binding contracts with dealers. He already had one reliable contact in his brother Wilhelm, who was willing to manage a main infant cereal depot in Lyons. As an employee of the Crédit Lyonnais bank, he handled the distribution of the product for his brother throughout the whole of southern France and peripheral regions in his spare time. In Paris, Nestlé found an excellent man for the job in E. Christen, manager of the Pharmacie du Caire, with whom he signed a contract in June 1868 to operate the main Paris warehouse. Some time later Christen also took over responsibility for the rest of France as well as overseas exports.

In Britain and the United States Nestlé had promised the respective agents exclusive distribution rights, and in these two markets he did in fact put his original idea into practice in its purest form by appointing just one trusted general agent importer.

Nestlé now paused a long while before granting any more general sales rights, though for simplicity's sake he would have preferred to extend the

“My product is fully in keeping with Liebig's principles, only I reach the same end by different means. I am proud of my invention and do not wish to steal anybody else's thunder; instead, I shall seek to bring honour to my own name.”

Henri Nestlé 1868

system. A customer had to turn in consistently good results for some time before he could hope to be granted sole sales rights in a given territory; and in return he had to agree to take a minimum amount of the product.

In the space of a year Nestlé moved from direct sales in Switzerland to a multi-level distribution system in other countries. With increasing product awareness and growing sales, it became easier for him to find agents and optimise the terms of the contracts. Even so, he was obliged for contractual and personal reasons to retain the different distribution structures and forms of contracts with agents or wholesalers for many years.

Nestlé considered various groups of people as possible trading partners. In the early days, when he was desperate to find anyone suitable at all, he had to rely on his previous contacts and connections. This meant mainly pharmacists and grocers. Later he increasingly emphasised the scientific basis of his infant cereal, building it up as a brand product and getting well-known scientists and numerous doctors to endorse it. Now he sought to back this up with the synergetic effect provided by pharmacies as the most suitable sales outlets for a quality product of this kind.

The product was mostly sent to the various agents and individual customers by rail. Nestlé chose this means of transport for both short-hauls and shipments to other countries. This may have been partly due to the fact that the Vevey railway station was just a few hundred metres away, though the decisive factor was the lower rates for bulk shipments – transport by mail coach was nearly twice the price. The trade-off was that rail was generally much slower. At the start he often sent consignments by passenger train, which was faster but involved a surcharge, and it was not long before he was urging his agents to place their orders in good time in order to benefit from standard goods rates. To improve supplies he even began sending his main agents regular shipments in fixed quantities, only skipping a shipment on special request.

Continuity of supply ex-works at low rates was an important part of Nestlé's marketing strategy. To a great extent, this involved sensitising agents and dealers to the problems of delays in delivery, getting them to hold sufficient stocks and continuously urging them to increase their sales efforts.

Transport factors also affected Nestlé's decisions in other areas of marketing. For example, the minimum weight for ordinary shipments by rail (25 kilograms [55 lb]) influenced his minimum order level (50 half kilo cartons). This enabled him to streamline his own transport arrangements and reduce his shipping costs. Transport conditions also affected packaging. As product quality often suffered severely on long transatlantic voyages, Nestlé eventually switched to tins instead of cardboard cartons for American shipments.

## Terms of sale

Price was long held to be the chief factor in a product's success or failure on the market. Today, in theory at least, pricing is only one component of the marketing mix among others, important though it is.

Henri Nestlé paid great attention to pricing, but by no means as a matter of prime importance. He did not, for instance, fix an agreed retail price with the dealers. He combined a variety of pricing methods reflecting product costs, the prices of competing and substitute products and the price customers were prepared to pay.

Like many firms today, he based his pricing on cost accounting. He calculated that 50 kg (110 lb, or 100 tins) of infant cereal cost him between 60 and 70 francs. He then added a profit margin. But unlike costs, the profit margin was not something he could calculate with accounting methods or by applying customary trade practices. He had to decide on a figure for the ultimate consumer that would be in line with market conditions, a price he thought people would be willing to pay before taking their custom elsewhere. He turned to his cousin Julius Nestlé, a skilled businessman and a wholesaler in haberdashery products in Frankfurt, who informed him he would find a ready market for his infant cereal at 1.80 francs, or 50 kreutzers, in Frankfurt. Shipment to Frankfurt (including transport and customs) cost Nestlé 95 francs, thus leaving him with a profit and trading margin of 85 francs. He wanted 45 francs as manufacturer, leaving the remaining 40 francs to the reseller. These rather rough and ready price calculations eventually gave rise to a specific profit margin of 40 centimes per tin.

Nestlé set the ex-works selling price at 1.05–1.10 francs for infant cereal and 1.20 francs for the iron-enriched version. He justified the higher price for the special tonic version not by increased costs but by the fact that it was a medicinal product and could therefore command a higher price. Thus he consciously took account of what customers would be willing to pay when pricing his products. He also advised agents and wholesalers to practice price discrimination. He recommended charging a higher price for wealthy customers who could afford to hire a wet nurse if they were unable to nurse their babies themselves and lowering the price for poorer people, institutions and hospitals.

One tin of infant cereal lasted five or six days depending on the age of the child. So it cost mothers 20 to 30 centimes a day to feed a baby on Nestlé's food in Switzerland and a little more in other countries.

Nestlé himself thought his product was reasonably priced compared to other milk, rusk and sugar mixes of similar nutritional value or a competing product to which at least milk had to be added. But compared with a

homemade flour pap or watered-down cow's milk it was expensive: a month's supply could well have eaten up a quarter or more of a Nestlé household maid's take home pay.

From the outset Nestlé had wanted to put his product within the reach of all sectors of the population, but he did not really succeed the way he intended. Though it certainly did become the daily infant food among the well-to-do, poorer people only ever bought it as a remedy in the case of an emergency.

For many people it was unthinkable to spend 20 to 30 centimes a day on infant food for any length of time. The average price of a litre (about 2 pints) of milk in 1870 was 12.5 centimes; a kilo (2.2 lb) of potatoes cost 7 centimes and the same quantity of half white bread 45 centimes. With hardworking adults getting barely enough to eat, an "unproductive" infant could not expect such expensive everyday fare. Although Nestlé would have liked to have it different, his product was a luxury for many. He was aware of the problem but was not prepared to lower the price. For one thing he was heavily dependent on profits to expand his factory, and for another he had to give his dealers an attractive trading margin in order to motivate them.

Operating as he did outside the established pharmaceutical and food trades, Nestlé was not bound by official pricing regulations and he used this freedom to adapt his prices as flexibly as possible to different local conditions. He relied on market forces and the independence and sense of responsibility of agents and retailers. He believed that the interests of manufacturer and sellers coincided, namely to move as much infant cereal as possible. For this reason he avoided overly strict contractual commitments and restrictions, as he did in other fields. Moreover, in the early days he simply had no choice but to leave his dealers plenty of leeway and attractive profit margins to get them interested at all.

Nestlé did not believe in bulk discounts, introductory offers, loyalty bonuses or any other form of price reduction, nor did he recommend them to his agents or retailers. Instead he tried to influence buyer behaviour through terms of payment and supply. His aim was to keep a firm grip on his own financial requirements and on operational efficiency, and to make conditions for dealers attractive enough to ensure a sufficient number of buyers.

As an inducement for dealers to carry the new product he always supplied the first shipment – and only that one – on trust. When the first delivery was cleared and if the dealer wanted to carry on selling the product, he had to pay for the orders. From the second shipment on, bills were payable within 30 days. However Nestlé soon had to extend this time limit to 60 days to help dealers build up business.

## Communications and sales promotion

Turning a small, craft-like business with its own shop and a local then regional catchment area into a company with worldwide sales required a whole range of measures to inform, convince and motivate all customers, dealers, scientists and doctors in every corner of the world. Nestlé emphasised the exclusive nature of his product by cultivating a distinctive, creative promotional style.

The most urgent task was to set it apart from the countless imitations of Liebig's baby soup that were mushrooming on the market in various forms. Nestlé wanted to be different, to make his product stand out, to put his own name on it and vouch for its quality. He deliberately set out to create and defend an image of his own, developing what we now call a brand product even before any such legal concept existed in Switzerland.

## The Nestlé brand name and nest symbol

Nestlé's name appeared in all advertisements and on all labels for his infant cereal, always in association with the name of the product: "Nestlé's Bread and Milk Flour" (Britain), "Lactous Farina Nestlé" (USA and Australia) [later: "Nestlé's (Milk) Food"], "Harina Lacteada Nestlé" (Spain), "Nestlé's Kindermehl" in German, "Farine alimentaire Nestlé" and finally "Farine Lactée Henri Nestlé" in French. The family and product names eventually became so firmly associated in people's minds that Nestlé's successors decided to retain the name "Farine Lactée Henri Nestlé" after the foundation of the limited company in 1875.

Just as important to Nestlé as the use of his own name was the creation of a distinctive trademark. This made him one of the first Swiss industrialists to methodically build up a "brand" product and image with the help of a special mark or sign (another was the chocolate manufacturer Suchard, a fellow exporter who helped publicise Nestlé's infant cereal among his overseas friends). The famous, eye-catching bird's nest featured prominently in all advertisements and publications and on all his labels, and is still used today in slightly modified form on Nestlé products round the world.

How did Nestlé hit upon this particular trademark? Simple as it may seem with hindsight in view of the meaning of the German "Nestle", a lot of thought went into it. Nestlé's eloquent family coat of arms consisted of a single (brooding?) bird sitting on a nest. In order to establish a visual link between the name and the product, Nestlé changed his family coat of arms

into a trademark by adding three young birds in the process of being fed by an adult and perched the whole thing on an oak branch. This established a connection between the coat of arms and the product while at the same time symbolising the purpose of the infant cereal with a picture of a mother feeding her young.

Nestlé adopted this trademark at the beginning of 1868. The consistent use of the same mark, together with its design, show that Nestlé was well aware of its communications function. He offered all agents and dealers of his infant cereal a copy of the mark featuring the original nest for use in advertisements or articles. The first year, as in other matters, he left the decision to the agents, but from 1869 he was urging its consistent use in all countries.

Use of the modified family coat of arms and his name as a trademark ensured Nestlé a certain amount of legal protection, at least in some areas. However, the problem of trademark protection became acute for Nestlé's successors: the name and mark were then no longer associated with the person of the owner and hence partly protected.

Even before the sale of the company was signed and sealed, Henri Nestlé took steps to obtain protection for his trademark – because even then his labels and trademark were being widely imitated in both Switzerland and abroad.

But it was extremely difficult for firms active in Switzerland to secure patent and trademark protection. Before 1879 (first Swiss Trademarks Act) and 1888 (Patent Act) Switzerland had no patent or trademark protection at all. Countries that had such laws on their books only granted protection to Swiss nationals or foreigners living in Switzerland if their own citizens' marks and inventions were protected in return. In 1864 Switzerland signed a reciprocal agreement on trademark protection with France, one of only a handful of countries, enabling Nestlé to register his mark there. In Swiss territory his successors filed the mark at the Vevey court registry on 10 September 1875 but they had to wait for the federal act of 1880 to obtain protection on a national level. It was they who took many of the imitators to court and were ultimately responsible for spreading the bird's nest trademark round the world.

It was even more difficult for Nestlé to fend off imitators of his invention. Though he had originally intended to patent the product in all countries, he was soon forced to admit that for the reasons outlined above this was going to be next to impossible. What is more, France, for example, did not allow patents on medicinal products at all, while Germany and later Switzerland exempted all foodstuffs and their means of preparation from patent protection. How Nestlé in 1868 nevertheless managed to obtain a 15-year French patent on his invention is a mystery, because he had to



The Nestlé family coat of arms.



1868



1938



1966



1988



1995

Evolution of the Nestlé logo.

get round two restrictive regulations. However, he was apparently aware of the shaky legal status of the patent as he never took legal proceedings against imitators. He must also have realised very early on that he had no chance of obtaining patents in other countries either. This added to his and his successors' determination to strengthen their lead over the growing number of competing products by other means.

## Packaging

A hundred and twenty-five years ago it was impossible for Henri Nestlé to think of all the details – the result of decades of later scientific research – we now consider essential in the choice and design of packaging. Even so it is astonishing how actively and intently he got to grips with the already wide range of factors involved.

In the past, manufacturers and artisans were concerned mainly with packing, i.e. getting their product safely from A to B, leaving “packaging” or product presentation to the dealer. This was to change with the rise of the food industry. Another model was provided by pharmaceutical firms selling patent remedies to an anonymous clientele: the packaging had to be made as attractive as possible to compete with the pharmacies.

When Henri Nestlé first marketed his infant cereal, most foodstuffs were still sold loose, though this soon changed for industrial food products. Nestlé decided to market his infant cereal in 500 gram (approx. 1lb) cartons and sold it packaged from the start. He justified this policy to dealers who wanted a loose product by stressing the protective function of the packaging. Its purpose was to protect the contents from damp and vermin during transport and storage at the dealer's and customer's locations while at the same time providing a safeguard against tampering or counterfeiting along the way.

Nestlé's quality standards and the fixed ingredients ratio dictated this procedure. Even so, it was impossible to rule out complaints about the quality of the flour or the product's keeping capacity entirely. As a result, overseas consignments were shipped in tins. After installing their own canning operation, Nestlé's successors introduced this practice across the board.

For Nestlé, the communications potential of corporate packaging was certainly just as important as its protective role. Handling his own packaging let him as manufacturer “talk” directly to the customer. The message factor consisted of four components: the label and instructions for use on the main surface of the tin, a round sticker on the lid and a narrow

band, or “seal of approval”, round the lid. Nestlé designed all four elements in the same year in association with the tin supplier and lithographer, incorporating suggestions from his agents.

The label came first. Nestlé wanted to keep it as simple as possible and make it the same for all countries. The many British tourists in Switzerland, for example, should be able to identify the infant cereal immediately with the product they knew from home. The chief features of the label were Nestlé’s surname, the name of the product, the trademark and Nestlé’s signature. As usual on such preparations, Nestlé’s label also stated who the product was intended for, in this case “infants and people in weak health”. Nestlé deliberately did not include any product details – these were given in a separate leaflet that was sent to all women. The round sticker on the lid showed the name of the country agent together with the price, and later the Swiss cross. The two other communications elements of the packaging (the seal and the instructions) deserve special mention as they reflect two key elements of Nestlé’s marketing strategy.

“I am afraid I cannot agree to let you change my nest for a Swiss cross. The cross looks very good on the lid, but I absolutely insist that my labels must be identical everywhere; the external appearance must be the same, only the text being translated into the language of the country. People must be able to identify my product at first glance. The nest is not only my trademark but also my coat of arms. (Nestlé means small nest.) [...] I cannot have a different trademark in each country [...].”



The lid stickers (before 1905) were visually similar in all countries with only the language being adapted.

## The “seal of approval”

Whereas virtually all competing products invoked the distinguished chemist Justus von Liebig, Nestlé’s goal was to establish his own name as a brand. However – in view of the success of “Liebig” products – he was neither willing nor able to do without the backing of scientific authority. Like the patent medicine manufacturers, he had to try to quickly build a relationship of trust between his novel food product and potential consumers.

But Nestlé’s name was not known beyond Vevey, and systematic use of the professional title “Chemist” on the product and in leaflets and advertising, etc., packed little punch as a scientific reference. He therefore tried not just to win over the most influential doctors wherever his product was marketed but also to feature a testimonial or at least the signature of a prominent scientist on his product. The idea was for some of the public trust in state certified doctors and scientists to rub off onto his product.

Nestlé found an excellent reference in the influential and respected French chemist J. A. Barral, whose knowledge of bakery he had drawn on in developing the infant cereal. In accordance with an agreement reached with Barral, from now on all tins of infant cereal marketed anywhere in the world must carry a special “seal of approval” bearing Barral’s name together with a short endorsement and guarantee. Nestlé agreed to pay Barral 5 centimes per tin sold, or more precisely for each seal he bought from Barral. Nestlé passed on the extra cost to the dealers.

The Franco Prussian War of 1870–1871 interrupted supplies from France, obliging Nestlé to sell the tins without Barral’s seals on them, and business relations with Barral’s son in London broke down altogether. Nestlé thereupon decided to discontinue use of the bands, and from 1872 Nestlé’s name on the tins was the only guarantee for the quality and “scientific” nature of the contents.

## Instructions for use

In the mid-nineteenth century, mothers who were dependent on substitute foods for their babies often relied on flour-based preparations. However, these were too thick and the infants had to be virtually force fed. As a result, in many regions an adult would often chew the food first. But the food was not only too thick, babies were given too much and it was also usually warmed up. Nestlé knew there was a risk of his product too being misused in similar ways. So it was not enough to just make an easy-to-prepare product if he did not take precautions to ensure it was used

correctly. It had to be thinned or thickened slightly according to the age, constitution and health of the child and fed at irregular intervals. Because of this, Nestlé wanted to leave these matters entirely in the hands of the individual doctor. However, because most mothers of small children never went to the doctor about feeding problems he decided in November 1868 to put general instructions for use on every tin. This should avoid the worst abuses, at least. Once again he put his trust in the knowledgeable Barral, who devised a suitable text.

## Advertising and public relations

As long as sales were limited to Vevey and region, Nestlé did not have to think much about advertising or public relations. His name was well-known. He was highly regarded and respected among the people for his past achievements, and word of the success of his infant cereal quickly got around.

Heartened by these successes, Nestlé at first thought distribution would go as smoothly in the rest of Switzerland and abroad. In this he was to be disappointed. Mothers would not buy an unknown product from a manufacturer they did not know, and many doctors were not interested in trying it out. Nestlé thereupon turned to advertising methods which had proved their worth above all in the field of patent medicines. For some time he promoted his product in frequent repeat newspaper ads, but he soon gave this up and came to rely more and more on advertising in the specialist press.

In line with his new strategy of cautious advance, distinguishing his product from patent medicines and switching to pharmacists and doctors as sales channels, he changed from advertising mainly in the popular political press to publishing reports by doctors and professors in medical journals. The target group now was, after all, professionals.

Nestlé's promotional copy was no different from that of patent medicine manufacturers in its headings, manufacturer details and applications, but he included none of the customary testimonials, thank you letters and detailed self presentations. He was only interested in demonstrating the superiority of his product on the basis of its properties.

He drew up a brochure based on personal letters and circulars to doctors, adapting the language and presentation to the individual target groups, and had it printed in large numbers. He sent copies to agents and dealers, whose task was to distribute them to doctors, midwives and – after consulting the birth lists – to mothers with new-born babies. Nestlé

*Henri Nestlé*

**NESTLÉ'S MILK FOOD**  
OF  
**LACTEOUS FARINA**  
made with the best cows' milk and forming an excellent food for infants.

PREPARED AT **VEVEY** IN SWITZERLAND.      **LONDON DEPOT** 48, Cannon Street, E. C.      F. C.



TRADE MARK  
Registered

**DIRECTIONS FOR USE**

**For Feeding bottles.** — Mix one tablespoonful of the Milk food with ten tablespoonfuls of water; then boil the mixture for a few minutes, with constant stirring.

**For a light Pap.** — Mix one tablespoonful of the Milk food with five tablespoonfuls of water; then boil the mixture for a few minutes, with constant stirring.

*N.B.* Neither milk nor sugar should be used in preparing the Milk food.

Keep this box in a dry place.

over the label. Boxes so signed are alone genuine. Beware of imitations.

**GRAND DIPLOME D'HONNEUR**  
**PARIS 1875.**





**SEULE RECOMPENSÉE**  
PAR UN DIPLOME ET UNE MEDAILLE  
décernés par la Société protectrice de l'Enfance  
à  
**L'EXPOSITION DE MARSEILLE 1874.**





**MEDAILLE D'OR PARIS 1889.**

This Package contains a Compound of  
**MILK, WHEAT and SUGAR, ONLY**



*Henri Nestlé*

Label (from 1900) with Nestlé's signature, the nest used as a logo and the lid sticker form part of the product's visual identity. Right: the Nestlé trademark was filed in Vevey in 1875. Swiss trademark legislation was not brought in until 1880.

141.



En Complément au dépôt de son acte de Société  
effectué le 17 Mars 1875 et pour se garantir officie-  
llement contre toute contrefaçon dans le pays et à  
l'étranger, la Société susnommée "Henri Nestlé" expose  
aujourd'hui au greffe du Tribunal de Vevey et pour  
être annexé à l'extrait du dit acte de Société qui  
s'y trouve, sa marque de fabrique, dont elle veut garantir  
le point son exemplaire.

Elle requiert la publication dans la Feuille  
des avis officiels de l'acte de ce dépôt ainsi que de la  
marque qui en fait l'objet

Vevey le 7 Septembre 1875

Henri Nestlé

Déposé au Greffe du Tribunal de Vevey le  
10 Septembre 1875 par M<sup>r</sup> l'avocat Hubert

Hubert  
Greffier

Déposé au Greffe du Tribunal  
de Vevey le 10 Septembre 1875 par  
M<sup>r</sup> l'avocat Hubert



Henri Nestlé

**FARINE LACTÉE NESTLÉ**  
ALIMENT COMPLET  
POUR LES ENFANTS EN BAS AGE

HENRI NESTLÉ



CHIMISTE A VEVEY





Vevey le 23 Février 1868

Monsieur le Directeur de la Gazette de Lausanne

Je vous prie de vouloir bien insérer l'annonce ci-jointe  
 une fois par semaine pendant les mois  
 de Juillet et Août et tous les quinze  
 jours pendant les autres mois de l'année  
 jusqu'à la fin de Décembre  
 M. S. Limond fils à Lausanne est chargé  
 de vous payer. Votre dévoué  
 Henri Nestlé

Nestlé printing plant for labels and promotional material in Vevey. Below: Nestlé's instructions for the subsequent insertion in the "Gazette de Lausanne" (23. 1. 1868).

Right: Various newspaper advertisements from different countries (1868–1883).

# FARINE LACTÉE H. NESTLÉ

GRAND DIPLOME D'HONNEUR

Médailles d'or  
à diverses  
EXPOSITIONS



Marque de fabrique.

Certificats nombreux  
des premières  
AUTORITÉS MÉDICALES

## Aliment complet pour les enfants en bas-âge.

Supplée à l'insuffisance du lait maternel, facilite le sevrage, digestion facile et complète. — Se vend dans toutes les bonnes pharmacies et drogueries. N 732 Q  
Pour éviter les nombreuses contrefaçons, exiger sur chaque boîte la signature de l'inventeur. Henri NESTLÉ, Vevey (Suisse)



# La farine alimentaire

DE  
Henri NESTLÉ

chimiste à Vevey  
est la nourriture la plus saine et la plus rationnelle pour les enfants en bas âge.

Il suffit de la cuire avec de l'eau, pour obtenir une légère bouillie appétissante, qui remplace avantageusement le lait, le pain et le sucre. Une boîte contient la nourriture pour environ une semaine, coûtée 1 fr. 50.

Farine alimentaire ferrugineuse, pour les personnes faibles de sang. 1 fr. 50.

Chez MM. Simond fils, droguiste, et Henri Monnet fils, rue de Bourg, 9, Lausanne.

# FARINE NESTLÉ

ALIMENT LACTÉ POUR LES ENFANTS EN BAS AGE.

Cette farine lactée est composée d'après les principes de la science et sanctionnée par la pratique, de manière à présenter aux enfants en bas-âge, aux personnes faibles et aux valetudinaires tous les éléments d'une complète nutrition et à l'état le plus assimilable.



Son emploi est des plus faciles : il suffit de la cuire avec de l'eau pour obtenir en quelques minutes un lait d'un goût parfait et formant une nourriture confortable et reconstituante avec laquelle la mère pourra nourrir son enfant avec la plus grande facilité et régularité.

Le savant chimiste, M. J.-A. BARBAL, a analysé cette farine, et M. le professeur MONOD l'a ensuite expérimentée et en a fait un rapport des plus élogieux. — Des lettres d'approbation de médecins distingués de différents pays ont été également adressées à l'inventeur, NESTLÉ, à Vevey (Suisse).

Dépôt central chez M. E. CHASTEN, ph., rue du Cairo, 31, Paris, et dans les princip. pharm.

VELKÝ DIPLOM ČESUNY  
JINDŘ. NESTLÉ-HO  
**živící moučka**  
pro děti,  
nejvýživnější potrava pro kojence a slabé děti. — Jedna krabice 90 kr.

(Ochranná známka.)

**J. Nestlého kondenzované mléko.**  
1 krabice za 50 kr.  
Hlavní sklad pro Čechy, Moravu a Slezsko u **J. Anděla, materialisty v Praze „u černého psa“** (Husova třída čis. 13.)  
Koupiti lze též u všech pp. lékárníkův a materialistů v Praze i na venkově.

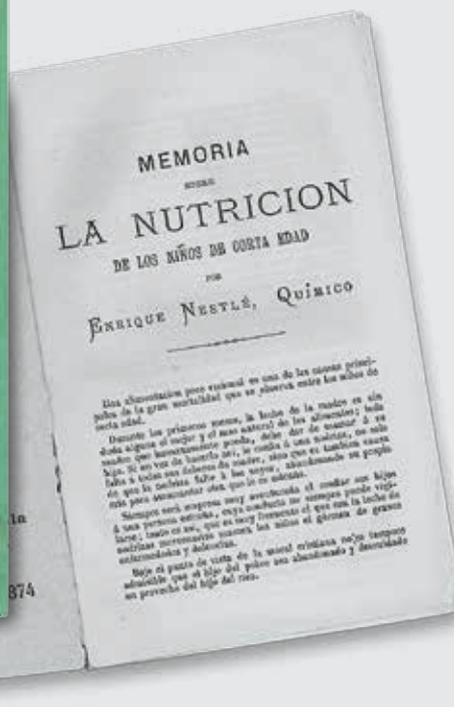
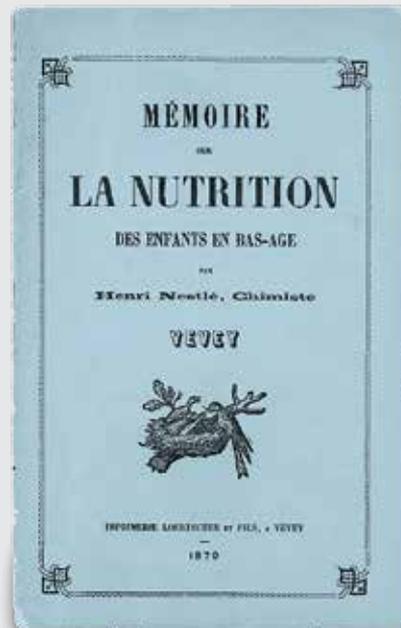
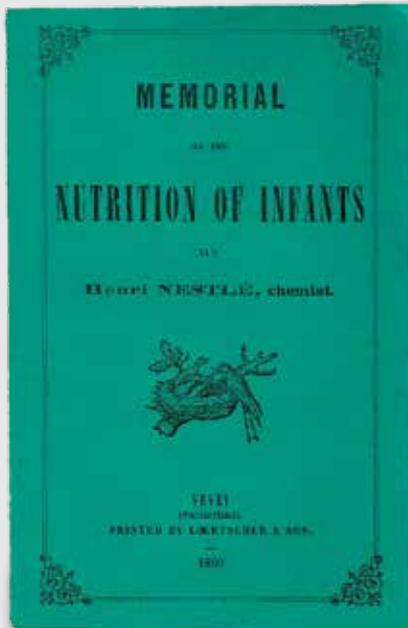
W. H. SMITH & CO.  
**Nestlé's Kindermehl**  
isthät die, wie zur Ernährung des Kindes am besten geeignet ist und kann bewiesen sein, dass dieses Lebensmittel ein solches ist, wie von der Natur selbst als die beste Nahrung für das Kind.  
Die folgende Analyse des Kindes nach dem oben angeführten ist die folgende. Nicht zu verwechseln mit dem anderen Mehl, in welchem die Milch vollständig ist, wie mit anderen Mehl, die nicht vollständig sind.  
**Sein Nahrungsmittel für Kinder bietet gleiche Vorteile, wie jedes andere Mehl, jedoch ist es besser geeignet.**  
Schwächliche Personen in der Kindheit, die nicht genügend Milch bekommen, können durch dieses Mehl, die beste Nahrung für Kinder, die Milch vollständig ist, wie mit anderen Mehl, die nicht vollständig sind.  
W. H. SMITH & CO. in London, England.  
Sampson'sche and

On Sale at all W. H. Smith & Son's Bookstalls, and at the Co.'s Depots.  
**NESTLÉ'S MILK FOOD**  
TRADE MARK  
for INFANTS, also for CHILDREN and INVALIDS.  
PREPARED IN VEVEY, SWITZERLAND.  
The Basis of NESTLÉ'S FOOD is choice Milk from Swiss Cows, to which is added a little sugar and some WHEAT FLOUR the insoluble parts of which have been excluded by a special PROCESS OF BAKING. The product obtained in this way acts as a solvent upon the casein, and prevents the milk from curdling in large lumps, thus rendering the whole compound, which is of the highest nutritive value, as digestible as MOTHER'S MILK. It is recommended by the highest medical authorities throughout the world.  
NESTLÉ'S MILK FOOD is INVALUABLE as CONTAINING MILK IN ITSELF. It is instantly prepared with the SIMPLE ADDITION OF WATER.



At the end of the 19th century advertisements were displayed in public places, here on a London bus.  
Right: In 1898, the Nestlé factory installed a reception and show room to receive visitors (c. 1900).  
Right, below: Postcard enabling retailers to order supplies of infant cereal (1874).





These memoirs written by Henri Nestlé, were published in numerous editions in several languages over the course of 30 years. Right: Metallic plaque advertising infant cereal in France (1895). Below: German brochure dating from the same period.

# FARINE LACTÉE NESTLÉ

## ALIMENT COMPLET

LE SEUL CONTENANT  
LE BON LAIT SUISSE



POUR  
**LES ENFANTS**



POUR  
**LES VIEILLARDS**

**EN VENTE DANS TOUTES LES PHARMACIES ET GRANDES MAISONS D'ÉPICERIE.**



# Nestlé's Kindermehl

**MILCH-ZWIEBACK-PULVER.**  
-20-jähriger Erfolg - enthält die  
reinste Schweizermilch.

*Das älteste und bewährteste Ernährungsmittel  
der Muttermilch.*

*Nestlé's Kinder-Nahrung  
ist sehr leicht verdaulich, verhindert  
Erbrechen und Durchfall, erleichtert  
das Calveinieren und ist schnell und  
einfach zu bereiten!*

Größte Produktion der Welt: über 20 Millionen Liter  
Täglicher Milchverbrauch über 100.000 Liter.

himself claimed that this method of “direct mail” allowed him to reach a large number of mothers who could now dispense with the services of unsatisfactory wet-nurses and rely solely on his infant cereal.

Nestlé quite soon (May 1868) began authoring articles on infant nutrition. Writing in a sober and objective style, he contrasted the countless problems of infant nutrition with the advantages and successes of his infant cereal. His first such article was published in the editorial section of the *Frankfurter Familienblätter* in June 1868. The impartial and authoritative quality of the newspaper’s editorial columns served to enhance this form of unobtrusive publicity. Readers found the contents more convincing than they would have been in a run-of-the-mill advertisement.

Nestlé had large quantities of offprints made of the articles and sent them to doctors and dealers, asking them in their turn to publish the contents in the editorial pages of other papers. He did the same with scientific articles on his infant cereal written by medical authorities. These activities brought a lot of quick inexpensive publicity for the product in a ‘serious’ tone as opposed to “brash” advertising.

As far as mothers themselves were concerned Nestlé stuck to his conviction that word-of-mouth publicity was best. He and his wife wrote hundreds of personal letters to agents, dealers and sales outlets urging them to promote the product and its correct usage with mothers personally and pointing out how well it was selling elsewhere.

Besides appealing to mothers and dealers, Nestlé was absolutely determined to gain the support of the medical profession or at least eradicate the widespread prejudice against baby food containing flour. His first disappointment came when an article on his product which he sent to his cousin in Frankfurt for the attention of the medical profession

**“I prefer publicising my product though scientific channels rather than by banging the big drum.”**

Henri Nestlé 1869

did not even get a hearing before the local association. Nothing daunted, Nestlé wrote another article and mailed it to each doctor individually. In addition, he wrote a specifically scientific paper “Memorial on the nutrition of infants” on the nutritional requirements of young infants. It provided an objective account of infant nutrition in general as well as details of the composition, usage, effects and successes of his cereal product. It was eventually published in English, French and German and ran into several editions. Nestlé sent copies of the brochure accompanied by a handwritten letter and free samples to countless doctors and midwives. It was so effective that other food manufacturers copied it, often in great detail, as an advertising tool.

The practice of medicine was increasingly crystallising as a distinct, recognised profession and Nestlé was determined to find support for his invention at the highest scientific and social levels from inside the profession as well. He began by personally canvassing leading chemists and doctors at universities in France and Germany. And in this way he did indeed succeed in getting famous scientists to analyse his product, conduct experiments and endorse it in writing. Once the first expert opinions were published, more and more doctors showed themselves willing to experiment with the product and spread the good word. Nestlé himself said that these publications in professional journals were very helpful in getting his infant cereal acknowledged and accepted by the medical profession.

Nestlé did not shrink from unconventional methods of promoting his brochure on a wider scale. He urged his agents to get it distributed through bookshops so that anyone interested could learn about his infant cereal at little cost. Bookshops were supplied with copies of the brochure for next to nothing on condition that they advertised it in the local press under their own name. This had the effect of toning down the commercial aspect of the publication, thereby enhancing its credibility.

This approach finally paid off, though it was not all Nestlé’s own doing. As with the other marketing tools, here too the agents and dealers played their part. Though Nestlé regularly canvassed their views and suggestions, he did not always know what was the most effective form of “propaganda” for each individual place and left the decision to them. Christen, his Paris agent, had a Nestlé leaflet inserted in each copy of a brochure advertising a spa at Vals-les-Bains and joined the society for the protection of children the better to promote Nestlé’s interests. It was also thanks to Christen that Nestlé’s infant cereal was first featured in an exhibition (the “Exposition Universelle d’Economie Domestique” in Paris) in 1872, where it won a gold medal. This was only the first of many awards, which were good for business.



Product calendar from the US (1889) and advertisement card from France (1893).  
Right: poster of Nestlé's condensed milk illustrating the importance of the railway for the rapid transportation of products (c. 1900). Below: Russian advertisement of 1892.



**ШВЕЙЦАРСКАЯ МОЛОЧНАЯ МУКА**

*Тетрика Нестле*

ДЛЯ <sup>МАМЫ</sup> **КОРМЛЕНИЯ** <sup>ВЪ ВЕВЕ</sup>

**ГРУДНЫХЪ ДѢТЕЙ**

Цена за Жестянку 1 руб. сер.

ЕДИНСТВЕННЫЙ АГЕНТЪ для всей РОССИИ

**АЛЕКСАНДРЪ ВЕНЦЕЛЬ**

СПЕТЕРБУРГЪ  
ЕКАТЕРИНИНСКИЙ КАНАЛЬ №1.

 A detailed advertisement for Nestlé's Condensed Milk. The central illustration shows a woman in a red dress milking a cow, with a child nearby. The background features a landscape with a mountain. The text is in Russian, highlighting the product's quality and its use for infants. The advertisement includes several medals and a logo of a bird in a nest.

## Development of the company

During the seven and a half years from autumn 1867 to March 1875 when Henri Nestlé was in total command of the company, sales increased from about 8 600 tins (1868) to 670 000 (1874). They passed the million mark in 1875.

Up to 1871, nominal growth was a relatively modest 30 000–40 000 tins a year. The main reasons were the difficulty of building up a dealer network, limited funds and an initially restrained marketing strategy deliberately geared to long-term growth. In addition, the Franco Prussian war of 1870–1871 left its mark on business through the disruptions it caused.

In the early years, getting the product known often proved well-nigh impossible because dealers failed to promote it with sufficient vigour, if at all, and doctors were reluctant to give it a try. It took Nestlé a year and a half of trial and error to develop and coordinate the various marketing tools – packaging, distribution through pharmacies instead of grocers, endorsements by scientific authorities and doctors, adaptation of advertising methods.

Sales then began to take off, not only in volume terms but also geographically. By 1874, Nestlé's infant cereal was being marketed in 18 countries in all five continents. Sales were dominated by Germany, Switzerland, France, Russia and Austria in that order. These were all countries in which Nestlé had laid down a marketing strategy himself or in close association with the dealers.

Things were different in the United States and Britain, where the main agents or importers were much more independent and to some extent went their own ways. In the States, sales stagnated at a modest level after significant initial successes, whereas in Britain business soon collapsed entirely and had to be rebuilt from scratch.

Putting "loyal" relatives (London) and friends (New York and London) into top jobs with hardly any control over them – a common practice at the time – did not pay for Nestlé. Though he broke off relations with his London agents completely in the autumn of 1872 because they were insolvent, he stuck by his New York agent despite a lack of progress. It was then up to his successors to crank up business in North America by appointing new agents and bringing in new methods of management control.

According to sales figures and information contained in Nestlé's correspondence, annual net profits under his management rose from 3 500 francs in 1868 to 267 300 francs in 1874. When he sold the company at the end of February 1875 he was making a profit of 1 000 francs a day (for 360 working days a year).

These figures can be put in perspective by comparing them with profit levels in the oldest mechanised branch of industry in Switzerland, spinning. In 1875, after eight years of operation, Nestlé was making a profit equal to that of the most profitable spinning mills in the best decade (1865–1875) of the entire 19th century. Twelve years later they had increased several fold.

The success of Nestlé's infant cereal not only spawned numerous competitors, above all in Switzerland, it also spurred a lot of interest groups to take him as a model and a yardstick.

Just what effects did his invention have on the medical front? What use did (independent) doctors make of Nestlé's infant cereal and what did they think of it?

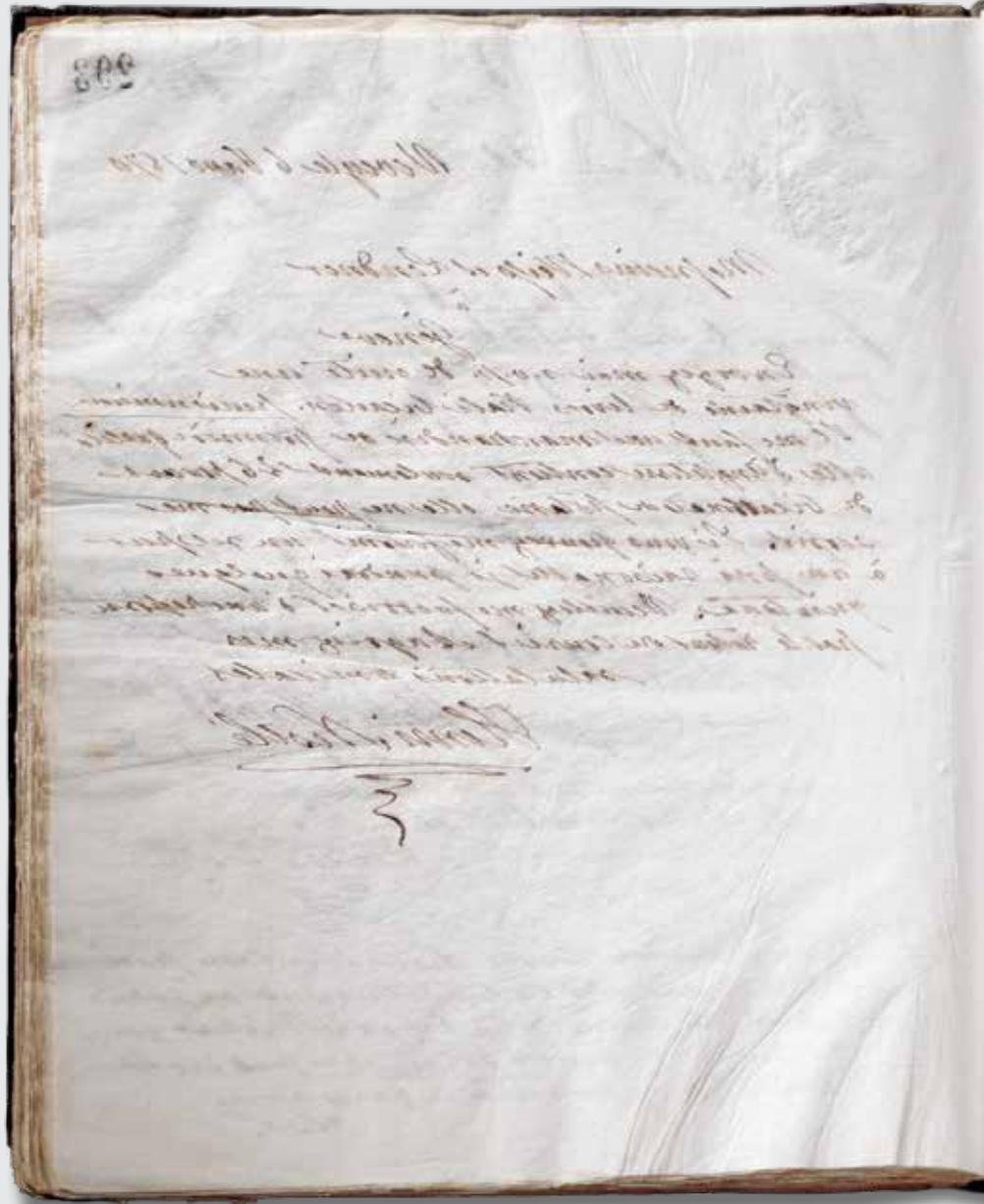
Leaving aside the numerous interviews involving Nestlé himself, accounts by doctors in medical journals were few and far between before about 1873. But from then on it became increasingly difficult for paediatricians to avoid Nestlé's product in the debate about alternative baby foods. The increasing numbers of practical trials finally led to a wide range of recommendations for use.

The general tenor of expert medical opinion of the time is that Nestlé's infant cereal was one of the best if not the best of the wide range of surrogates on the market. These opinions were still based mainly on practical experience unsupported by scientific proof but backed by Liebig's chemical analysis of the product in relation to mother's milk.

Physicians recommended Nestlé's infant cereal not only because it was generally well tolerated but also because it was easier to prepare than similar products (the convenience aspect) and was manufactured under controlled conditions. Thus the product image Nestlé had been at such pains to project had the desired impact on independent doctors as well. The product also found its way into housekeeping manuals.

Liebig had been accused of trying to promote his "baby soup" as an alternative to good breast milk. Nestlé largely escaped such charges. He headed off critics by emphasising wherever he could – at the beginning of his memoirs, in letters and newspaper articles – that "mother's milk will always be the best and most natural food during the first few months of life".

However, from the mid-1870s onwards influential paediatricians, turning a blind eye to empirical results and relying purely on theoretical chemistry and physiology, mounted increasing attacks on the use of infant cereals, including Nestlé's. This negative attitude was based partly on the notion – discredited towards the end of the 19th century – that a lack of enzymes in the saliva prevents babies from digesting flour



Copy book of Henri Nestlé's business correspondence (1871).

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Venus 4 Janvier 1874.

Monsieur William de Clavel.

à Genève

Après lecture de votre lettre du 28 décembre  
je vous en remercie j'ai l'honneur de vous adresser  
le fascicule avec votre envoi.

En outre j'ai l'honneur de vous remettre  
facultés sans conditions pour l'usage que vous voudrez  
en faire. En attendant que votre lettre, ainsi que  
mon dernier avis et votre réponse, soient parvenus.

Je suis persuadé que vous serez satisfait de  
ce que je vous envoie. Je vous prie de m'en  
faire part. Je vous prie de m'en faire part.  
Il vous envoie également une copie.

Je suis, Monsieur de Clavel, avec toute ma  
très haute estime et toute ma haute estime.

Je vous prie de m'en faire part.  
Je suis, Monsieur de Clavel, avec toute ma  
très haute estime et toute ma haute estime.

Henri Nestlé

à Berlin  
 Droits d'Entrée pour la Farine  
 Lactée  
 par boit. 100<sup>kg</sup> 30% 3.10.  
 grande vitresse 4% 3 4.20.

à Lyon

grande vitresse &  
 Droits d'Entrée de 100 Kilog<sup>s</sup> 25.35.  
 comprises  
 ou 100 boites f 14.70.

à Vienne prise de revient facture comprise  
 la boite de grande vitresse 55<sup>1</sup>/<sub>2</sub> argent.  
 " de petite vitresse 52<sup>1</sup>/<sub>2</sub> argent

à Cologne. (J. J. Frey Bâle).

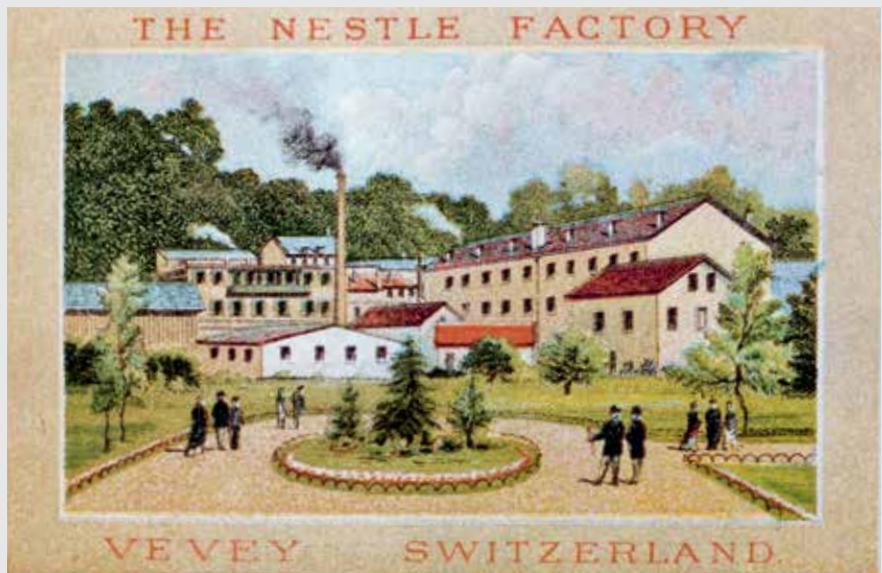
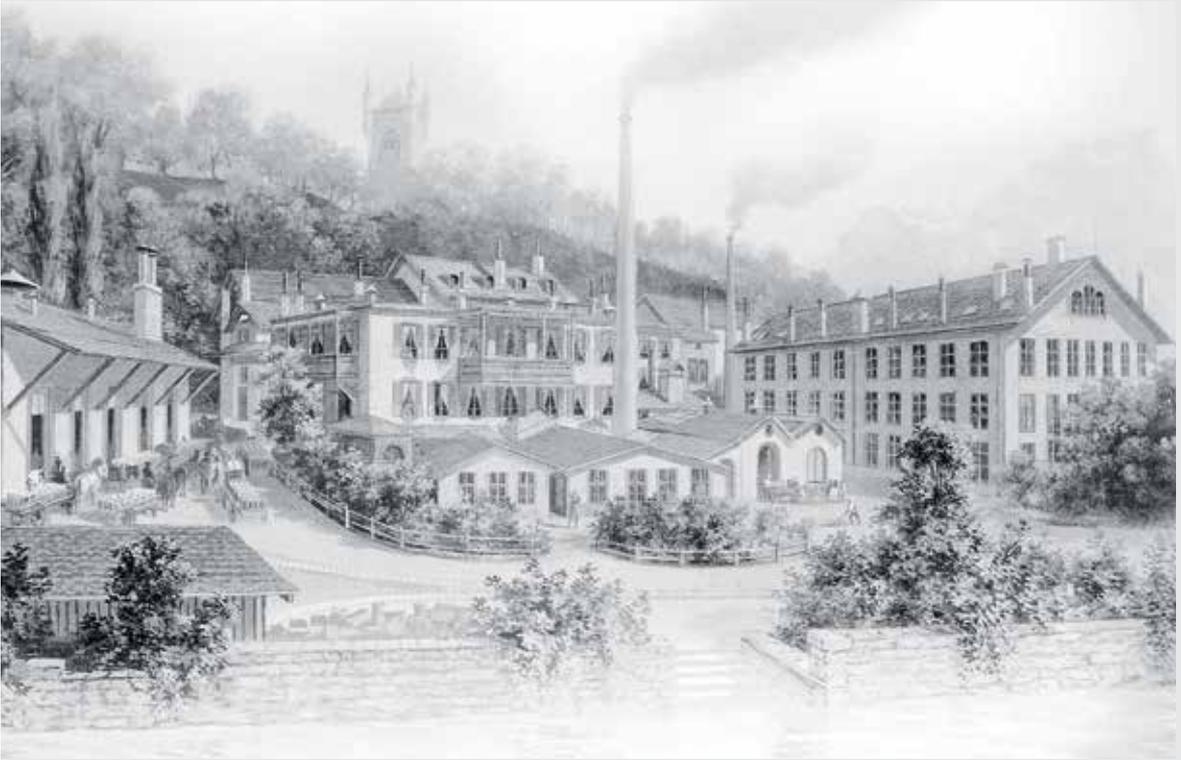
grande vitresse f 7.50 30%  
 petite vitresse 4.35 10% —

à Gènes

facture f 110. —  
 Co 10<sup>e</sup> grande vitresse 30% 18. —  
 Droits 2.25  
 f 130.25

facture f 110. —  
 Co 10<sup>e</sup> petite vitresse 12.50. 7.50  
 Droits 2.25.  
 f 119.75

Bièvre Sobrier à 1.10 f 55.-  
 Voiture de Bièvre f 8.65  
 Déclaration 1.08  
 Signalise —.30  
 Bi's: Sabier —.20  
 Droit d'entrée 1.47  
 Transport à Demer 1.40  
 sans frais. — 50. 13.80  
 ou f 137.60 les 100 litres, f 68.80

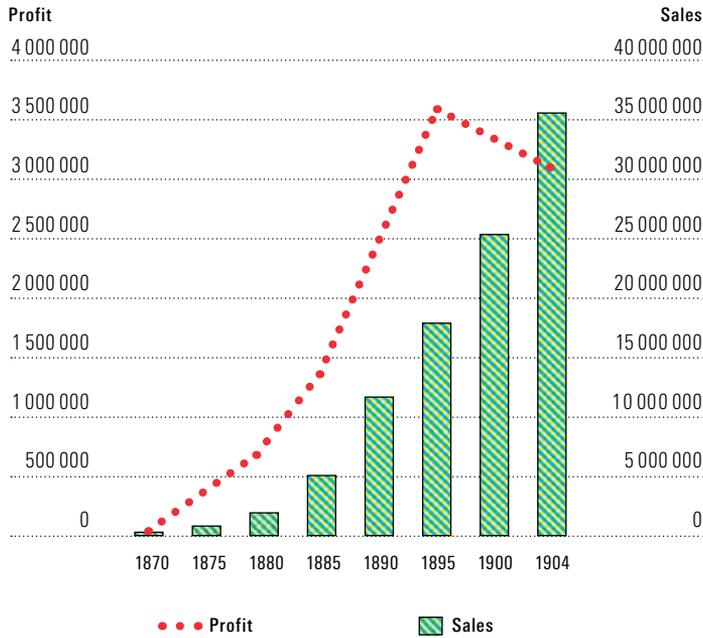


General views of the Nestlé factory in Vevey (top 1888–90; below before 1880).

products. But above all, the “powdered food” was spurned as a patent medicine and the familiar arguments (brash publicity, bypassing of medical treatment by the inclusion of instructions for use) were wielded against it.

As Nestlé’s infant cereal was promoted as a scientific product, its inventor and his successors were obliged to continuously update its formulation in the light of new findings. The mineral salt content was varied but dextrinised flours remained a constant. From the 1920s and 1930s onwards, real progress in scientific research on infant nutrition, above all in the field of vitamins, finally led to the development by the Nestlé company (at the time called the Nestlé & Anglo-Swiss Condensed Milk Company) of a whole range of different dietetic milk-based specialities for the selective treatment of specific symptoms.

## Sales and profit of the Nestlé company (1870–1904) (in CHF)



## Sales of infant cereal 1875 (per country)

Switzerland	140 929
Germany	601 660
France	118 437
United States	15 000
England	5 752
Holland	18 400
Egypt	650
Australia	–
Belgium	10 654
Brazil	24 500
Equator	–
Italy	8 246
Japan	450
La Plata/Argentina	5 200
Canada	5 072
Mexico	700
Dutch Indies (Indonesia)	840
Austria	69 934
Ottoman Empire	1 950
Russia	71 450
Serbia/Balkans	404
Scandinavia	6 120
Spain	–
<b>Number of tins</b>	<b>1 106 348</b>

## Geographical breakdown of infant cereal exports (1868–1875)





# Sale of the Company and Henri Nestlé's Final Years

1875–1890

## The company is sold

In 1873, Nestlé's business in Vevey was on a firm footing for the first time. He had repaid all his mortgage debts and was able to finance the latest factory extension from his own funds. Sales of infant cereal continued to rise steeply, helped by the opening up of new markets in Mexico, Argentina, Scandinavia and the Dutch East Indies (Indonesia).

Nestlé now wanted to seize the opportunity represented by his company's flourishing fortunes to improve his legal status at his place of residence. He was tired of continually having to renew his residence permit, and in October 1873 applied for civic rights in the commune of Vevey for himself and his wife. (The commune, or "municipality", is the cellular unit of Swiss life implying much more than a mere unit of local government. In Switzerland naturalisation was and still is primarily a local matter.) Satisfied that he was a "good candidate", the town council approved his request shortly before Christmas and passed his application on to the cantonal authorities. After being naturalised a citizen of the canton of Vaud, Nestlé was given full civic rights of the town of Vevey on 11 September 1874, having previously renounced his links with Frankfurt.

Only days after becoming a naturalised Swiss citizen in the canton of Vaud in August 1874, Nestlé bought a residence in Glion above Montreux for 30 000 francs. Between September and November of that year he signed numerous preliminary contracts for other properties totalling

60 000 francs. These transactions marked the beginning of a clear shift in the focus of his investments from industry to real estate.

This leads to the conclusion that even at this point Henri Nestlé was toying with the idea of handing over the reins of the company. Though he may not yet have finalised his decision to withdraw completely, he obviously wanted to use part of the profit for his personal ends. Nestlé was now sixty and though there are no records of illness or infirmity, the huge workload of the last seven years must have taken its toll. It is only natural that he should be wanting to divest himself of some of his responsibilities.

However, all this is not enough to account for Nestlé's decision to pull out altogether. Someone who builds up a business like this at fifty-four and is willing to continuously rethink and relearn is hardly too old to play a leading role in his own success story at sixty.

A lot of things were clamouring for attention as 1874 drew to an end. One urgent item on the agenda, already mentioned, was an extension to the factory to deal with the problem of production bottlenecks. Then, Nestlé was planning his own can-making operation. All in all, it added up to a major investment package.

About 30 people now worked in the Vevey factory, and the number of agents and dealers, foreign markets, geographical product distribution and sales had expanded in parallel. Up till now, Nestlé had steered an expansion course by sheer hard work as a flexible, pioneer businessman with a flair for improvisation. But as the company grew, so too did the need for new structures. The volume of work now made it impossible to maintain close personal contacts with every agent or even dealer. Formalised rules and supervisory mechanisms were becoming inevitable.

“Having sold my name, I had  
to turn to my wife for a new one [...].”

Henri Nestlé 1875

Clearly, Nestlé's private circumstances and the firm's operational situation made change essential. He had no option but to offload some of his duties, introduce a new management system and institute the necessary long-term provisions for his succession taking into account the new participation and ownership setup.

There was no compelling need for him to sell out or relinquish control entirely. Yet this is exactly what he did. As he himself put it, he was swapping "his handsome business, which had brought him so much honour and money, for dirty banknotes, at the same time taking a substantial cut in income."

It is not easy to give a simple, definite reason for Nestlé's decision. His previous experience with business partners, his preference for clear-cut lines of ownership and control and the need for peace and quiet in view of the challenges ahead probably induced him to sell. Yet here again we find proof of his remarkable flexibility. Once the decision was taken, he seems to have had no difficulty extricating himself from the successful business into which he had poured all his energies day after day for so many years. His successors agreed to keep him on as scientific director and retain his services as an adviser, but their independent, self-assured style soon caused him to change his mind.

At the end of 1874, various people got to know of Nestlé's plans to reduce his work load or perhaps even sell out. At least two groups seriously interested in buying the company or acquiring a stake in it started to form behind the scenes. Isaac Demole from Montreux and his neighbour Schlipfer seem to have been setting the pace. They had already reached an agreement with Nestlé to buy the firm for one million francs. Demole took the train to Geneva to see his father-in-law about financing the deal. On the way he met one of the Monnerat brothers and told him about the negotiations with Nestlé. As the Monnerats together with Pierre-Samuel Roussy, Nestlé's flour supplier, were also interested in the business, Monnerat took the next train back to Vevey to tell Roussy about the talks between Nestlé and Demole. With Roussy's nephew Gustave Marquis, they agreed on the financial arrangements and made Nestlé a secured offer to buy on the same price basis.

The negotiations were conducted by Roussy, who had been a personal friend and supplier of Nestlé for years and also brought him customers for his infant cereal. Roussy threw in a carriage and pair on top of the million to induce Nestlé, and above all his wife, to change their minds. It seems unlikely that it was really this that clinched the deal, as Nestlé's contemporaries seem to have believed. It is much more likely that the issue was swayed by the prospect of guaranteed payment and the long-standing close association between Nestlé and Roussy. These factors were a guarantee for Nestlé that the firm would continue to be run in the familiar manner in line with his original plans.

On 9 January 1875 Roussy signed a promise to buy with Nestlé before a notary public. Rocketing demand for the firm's product dictated a swift conclusion to the deal, and the sale was brought forward from 1 May, as originally planned, to 1 March 1875. The public learnt of the "sensational sale" from the press three days after the promissory agreement. Everyone connected with the company was notified by circular. Emphasis was placed on continuity, reflected among other things in the retention of the Nestlé family name. Thus, with the sale of the company, Nestlé signed away both his own name "Farine Lactée Henri Nestlé", and his signature "Henri Nestlé" to the new owners. To avoid any confusion Nestlé was obliged in future to sign his name as "Nestlé-Ehmant".

The entire movable assets and real estate were valued at one third of the selling price of one million francs. The remaining 667 000 francs were paid for the "factory's industrial and commercial value", meaning the dealer and customer relations that had been built up over the years, company and product names including the company trademark, patents, medical correspondence – in short, everything remotely connected with the infant cereal business.

## The joint stock company to Nestlé-Ehmant's death

On 8 March 1875, exactly a week after the official transfer of the business, "Farine Lactée Henri Nestlé" was established as a joint stock company for a duration fixed at twenty years. The board of directors consisted of the three main shareholders, Pierre-Samuel Roussy, Jules Monnerat (chairman) and Gustave Marquis, who between them owned two thirds of the shares. The remainder were held mainly by other family members and a few important employees with close ties to the business. The legal form of a joint stock company gave the firm the scope to broaden its financial base to allow for future expansion plans, even if the shareholders remained a small group (the firm's shares were not traded on the stock market) linked by personal ties and dominated by local financiers.

The ink on the contract had hardly dried before Nestlé's successors set about extending the factory. Strong demand, growing competition, the lack of patent protection and the need to service their debts left them no choice but to expand their operations. Before the year was out, Nestlé's successors had doubled the company's production capacity. Further expansions followed. A railway siding was added in 1889, and with the completion of a 62 metre (203 foot) high chimney in 1890, the year of Nestlé-Ehmant's death, expansion provisionally came to an end.

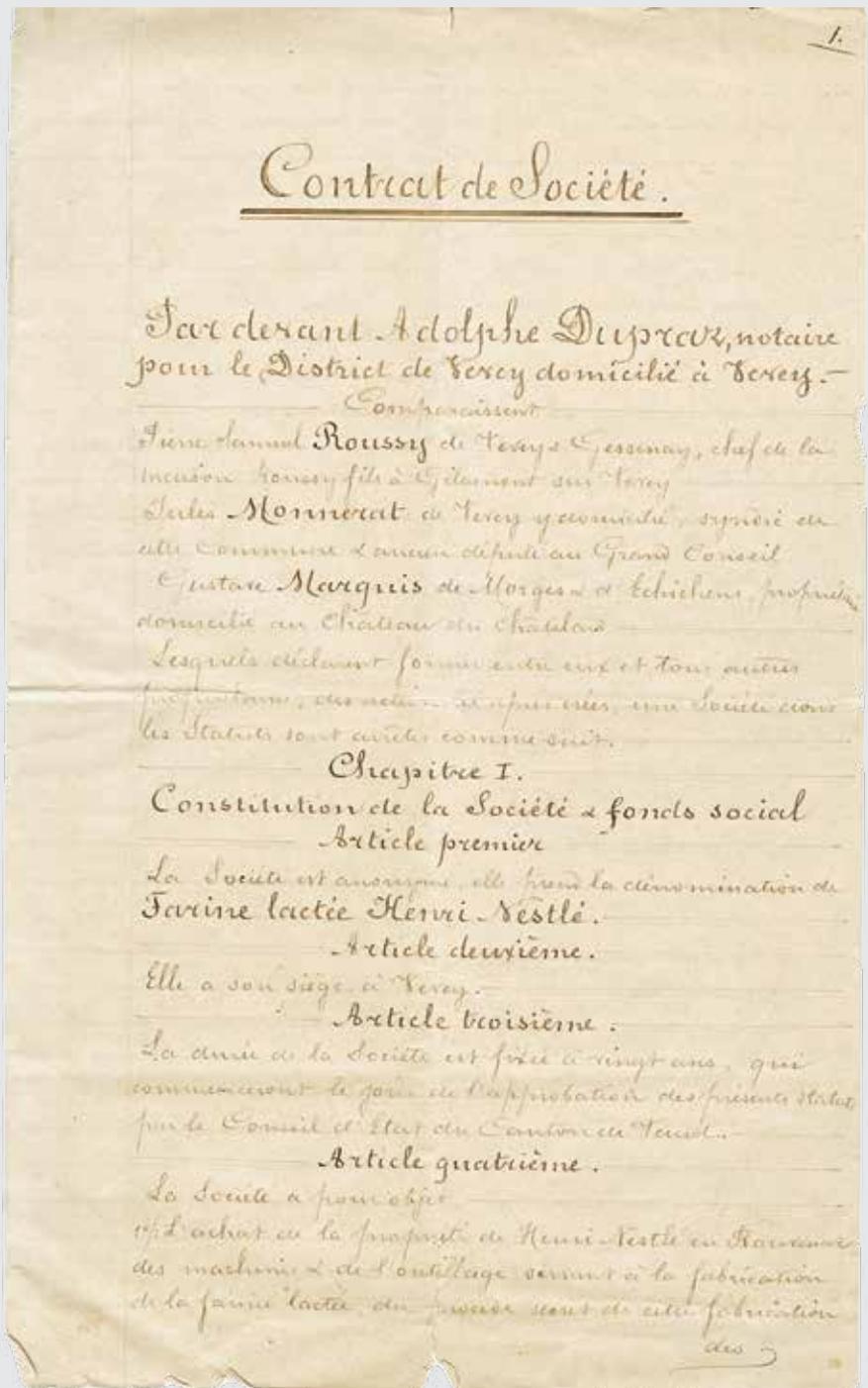
The Vevey plant was now turning out about 2.8 million tins of infant cereal and 2.2 million tins of condensed milk a year. In addition, 90 000 tinplate cans were rolling off the production line every day for shipment to the infant cereal and condensed milk filling plants in Bercher, Payerne and Edlitz.

The company took up the production of condensed milk to fight the competition from Anglo-Swiss in Cham. Anglo-Swiss had launched its own infant cereal product a year earlier, whereupon many retailers, wishing to obtain their supplies of condensed milk and infant cereal from a single source, gave up Nestlé's product. With sales plummeting and profits collapsing, Monnerat suggested going into the condensed milk business as well. The original idea was to reserve the condensed milk for those dealers who only wanted to deal with a single source or who had been pressured by Anglo-Swiss into carrying both of its products. A condensed milk operation was up and running within a month thanks to the services of a long time ex-foreman from Cham and seven workers. In the second year of production (1879) the Nestlé company was already turning 1 072 tonnes of fresh milk into condensed milk, and this product line was already in the black.

In 1880–1881, limited supplies of fresh milk in the Vevey region prompted the Nestlé company to set up a condensed milk factory at Bercher, a farming centre some 30 kilometres (19 miles) north of Lausanne. Soon, even these supplies were no longer sufficient to satisfy growing industrial demand. The firm therefore established its second Swiss subsidiary in the form of another condensed milk plant in Payerne.

The first production plant outside Switzerland was built at Edlitz-Grimmenstein about 80 kilometres (50 miles) south of Vienna in 1883. It was sited in Austria because of a sharp rise in import tariffs. As early as 1879, Monnerat had been pressing for a factory in Germany for the same reason. The death of P. S. Roussy, who had drawn up the plans for the German project, together with worries about the redistribution of sales territories in Germany and the cost of the whole operation, put a halt to such projects for the time being. Besides the production facilities, the Nestlé company in 1890 maintained an independent sales office in London (from about 1877) and had its own printing works in Switzerland (1882).

The new owners largely adhered to the founder's basic strategies, honing and expanding his marketing tools. One change Nestlé-Ehman's successors did make in the light of the growing pressure of competition was to drop his aversion to publicity. Within the space of one year (1875 to 1876) the advertising budget was bumped up from 11 000 francs to more than 100 000 francs.



Deeds of the limited company "Farine Lactée Henri Nestlé" established by the successors P.S. Roussy, J. Monnerat and G. Marquis (1875).

Right: Circular giving notice of the company transfer and the new authorised signatures (1875).

P. 15 / doc. 273  
 Vevey, le 1. Mars 1875.

M

J'ai l'honneur de vous prévenir qu'à dater de ce jour, j'ai  
 vendu mon établissement à Messieurs ROUSSY, MONNERAT & MARQUIS,  
 qui continueront, comme je l'ai fait moi-même, la fabrication de la  
 Farine lactée.

Par ce fait, ces Messieurs sont devenus propriétaires de mes  
 secrets de fabrication, de mes brevets & de ma marque de fabrique.  
 Mon nom reste aussi attaché à la nouvelle Société qui contiendra  
 à signer: HENRI NESTLÉ

De manière à donner toute garantie pour l'avenir à ma  
 nombreuse clientèle, j'ai également consenti à rester avec mes suc-  
 cesseurs à titre de Conseil honoraire, & m'occuperai spécialement de  
 la partie scientifique.

Le personnel de l'établissement restant donc exactement le  
 même comme du passé, j'ai la certitude que la nouvelle maison  
 contiendra à mériter la même confiance dont vous m'avez honoré  
 jusqu'à ce jour.

Veuillez M. \_\_\_\_\_ prendre note de la signature de mes  
 successeurs, agréer l'assurance de ma considération bien distinguée.

Henri Nestlé

Monsieur Roussy signera:

Henri Nestlé

Monsieur Monnerat signera:

Henri Nestlé

Monsieur Marquis signera:

Henri Nestlé



In Bercher (Switzerland), a factory was built for the manufacturing of condensed milk in 1880.  
Right: The first foreign production plant was acquired at Edlitz-Grimmenstein (Austria) in 1883.



It is presumably thanks to Nestlé-Ehmant's record of success that his methods were retained, even if corporate structures were revised, contracts modified according to results and new regulations brought in. Labour relations no doubt benefited from the fact that the new owners, too, were well established local figures and were therefore obliged to respect existing habits and arrangements. The works regulations which were introduced when the company changed hands therefore merely formalised the status quo. They are moderate and progressive compared to some. Above all, the Nestlé-Ehmant welfare institutions were maintained. The firm provided board and lodging for employees, financed the construction of flats for workers, paid (modest) bonuses, made gifts of wine at Christmas, distributed free tins of infant cereal and contributed to insurance funds. A cantonal census in 1887 showed that the two Nestlé firms in Vevey and Bercher employed a total of 325 people. By 1890 the payroll was up to 470.

The firm proved as profitable for its new owners as it had been for its founder. Infant cereal remained the mainstay, while profits in the fiercely contested condensed milk market were relatively modest.

“Up there at 3000 feet [900 meters] above sea level, there is no churchyard, no doctor, parson, lawyer, etc., so all the prospects are for a long life. The climate is excellent, laurel still thrives there, the view is magnificent, and there are plenty of inns. The telegraph, gas lighting and the post represent modern civilisation without its drawbacks; in short, I do not believe one could easily find a finer place on Earth in which to enjoy one's life in peace.”

## Epilogue

The sale of the firm made Nestlé-Ehmant a rich man. As of March 1875, he had an additional half million francs in the bank and received regular interest payments on the bonds which made up the other half million he received from the sale of the company. For the first time in years he now had time for things which had had to take second place to his work. But how was he going to spend his time and money?

At first, Nestlé invested both these assets largely in the classic manner of fitting out his retirement home. He stepped up land purchases near his house in Glion and by the end of 1875 owned some 2.9 hectares (7 acres) in the area. On 1 May 1875 he and his wife moved into the residence which later became known as Villa Nestlé. Glion was then a small village in the commune of Planches which had only gained the right to levy its own taxes in 1874. In the 1870s it became a venue for mainly foreign tourists, leading to the construction of numerous hotels.

Right next door to Nestlé's property was one of the best inns in the village, the Hôtel du Righi Vaudois, whose owner Auguste F. D. Heimberg, a native German from the Hanover area, seems to have been on good terms with his future neighbour. Just four days after pledging to sell his company to Roussy, Nestlé-Ehmant promised Heimberg a loan of 125 000 francs to expand his hotel. Four months later, in May 1875, the loan agreement was signed in the presence of a notary. Nestlé thus invested fully one quarter of the cash payment he received for the sale of his company in the local tourist industry, which was just about to take off. He had already put another quarter into the house and land in Glion.

He was always helping people out with small loans, besides championing efforts to improve the local infrastructure. Water and fountains figure prominently in Nestlé's life. In Frankfurt it was the municipal water system and the street fountain in front of his parents' house, in Vevey the first thing he did when he bought the factory in 1843 was to lay on a water supply and set up a mineral water plant. In 1872 he was urging the Vevey authorities to build a small fountain in the part of town where he lived, and now he was eager to put Glion on the mains.

The public springs in Glion yielded just enough water to supply a single public fountain and a drinking trough for cattle. The construction of large hotels and the growing need for fresh water had made water a scarce commodity. A village commission had been looking for a solution for some time. The problem was money, or rather the lack of it. Nestlé offered to pay half the acquisition and development costs of a new source of water supply in exchange for rights to half the water. A privately owned spring was finally bought in nearby Les Avants for 10 000 francs and piped to Glion at a cost



The house in the foreground on Place Trait-Planches, Montreux, was the Nestlé-Ehmants' winter residence (1905).  
Right: Glion where Nestlé-Ehmant stayed in a house next to the Hotel "Righi Vaudois" during the summertime.  
Below: Montreux's covered market, financed in part by Henri Nestlé.



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GLION avec vue sur CLARENS



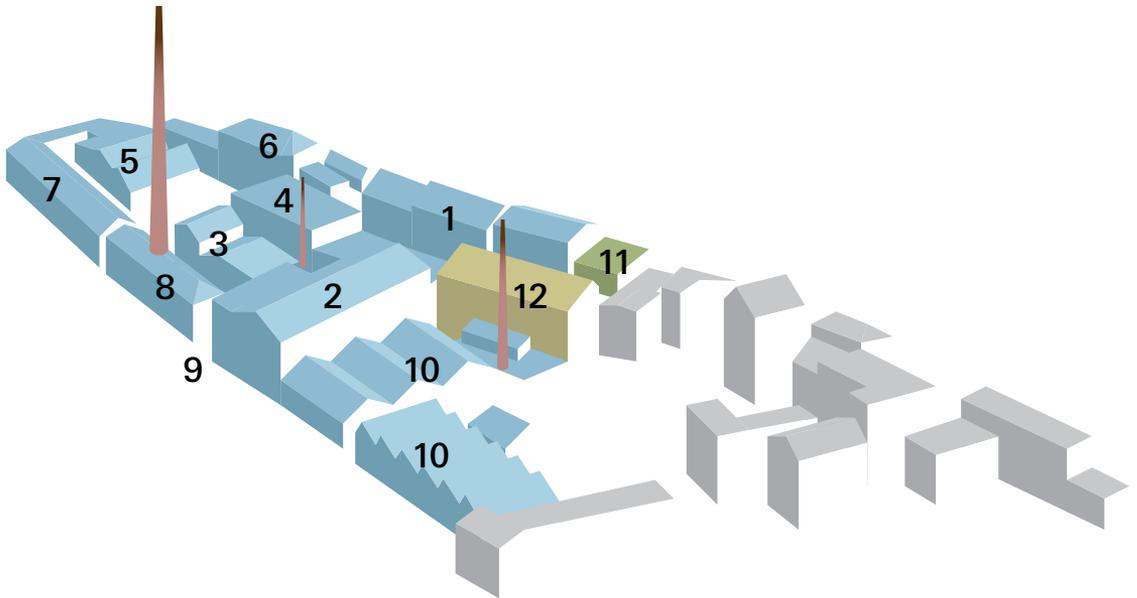
Montreux — Les Halles du Marché B. &amp; F. No. 446.



Nestlé factory in Les Bosquets, Vevey, during the 1930s.

## Nestlé properties in Les Bosquets

*in the 1930s*



- 1 Printing department and workshops (Henri Nestlé's first house)
- 2 Factory
- 3 Bakery
- 4 Villa (office and living quarters)
- 5 Dairy
- 6 Office and laboratory
- 7 Warehouse
- 8 Boiler and big chimney
- 9 Main entrance
- 10 Tin factory
- 11 Office (first home of François-Louis Cailler, later to become Daniel Peter's house)
- 12 Factory and laboratory (formerly Daniel Peter's factory)



Gravestone of Henri and Clémentine Nestlé-Ehmant at the Territet cemetery, now the "Parc des Roses".

of 80 000 francs. Without the 45 000 francs put up by Nestlé and the heavy water requirements for his house, garden, aviary and fountain, the project would have remained for long a pipedream. Nestlé placed the surplus water at the disposal of the population by having a public fountain built in 1878 on the road opposite his house (it still stands at the junction of Route de Glion and Route de Champ-Fleuri).

As with water, so with public lighting. In Frankfurt he had witnessed the introduction of gas lighting. In Vevey he had been involved in gas as a chemist and a businessman. Now, in Glion, Nestlé stepped in again when gas lighting came onto the agenda. Five lamps were considered necessary for public lighting. Nestlé paid for the installation and running costs of the lamp that was installed at the corner of his property. Shortly before his death he guaranteed the village of Trait-de-Bon-Port (now part of Montreux) 100 francs a year for five years to help finance an electric lighting project.

Among Nestlé-Ehmant's countless public donations, his contribution towards the construction of a covered market in Montreux deserves special mention. In 1883, about a year after the death of their foster child, the Nestlés built a house in Trait-de-Bon-Port. They spent their summers in Glion and their winters in Montreux. With his interest in public affairs, Nestlé got wind of the planned market. After dragging on for years, discussions were on the point of collapse when in February 1888 Nestlé offered to contribute 60 000 francs to the project, a figure he later upped to 80 000 francs. By the end of June the same year his offer was signed and sealed with the Montreux regional authorities. The only proviso was that Nestlé or his wife should be paid an annual interest of 5 per cent (4 000 francs) on the amount of the donation for the rest of their lives. In this way he assured a state guaranteed pension for himself and his wife, and Montreux got a covered market which was built in 1891, a year after Henri Nestlé's death.

On 19 February 1890, less than five months before his death, Nestlé rewrote his will for the last time on a few pages of a school exercise book. There was no longer any mention of his dead foster daughter's family. Instead – besides making his wife and a Vevey banker his heirs – he left various properties to his niece and nephew, who had lost their mother at the ages of six and eleven and their father eight years later. Nestlé seems to have sensed death coming. He had his last will and testament officially authenticated by a notary just two days before he died.

Henri Nestlé-Ehmant died at home in Glion at 11.30 a.m. on Monday 7 July 1890 "after a short illness". He was seventy-six. He was buried in the cemetery of Territet near Montreux two days later. The same day, the house was sealed by the authorities in the presence of Clémentine Nestlé and the banker Montet. In the probate proceedings Clémentine claimed, apart

from her personal property and possessions, an amount of 50 000 francs which she said she had given her husband over the years. Though there are no documents to support this claim, her statement may indicate that Clémentine had helped finance her husband's various business transactions from the private fortune she had brought into the marriage.

Unlike her outgoing husband, who seems to have enjoyed a joke, Clémentine Nestlé made a haughty, aloof impression and does not appear to have had any close friends in Montreux. She died ten years later on 28 June 1900, shortly before her sixty-seventh birthday and was buried next to Henri in Territet. She made a variety of bequests from the remaining portion of the Nestlé fortune to charitable institutions, leaving the bulk of the estate to her brother Heinrich Ehmant in Freiburg, Germany.

Immediately after Clémentine's death her housekeeper, a great-niece of Nestlé's, sold most of the furniture and personal belongings to a local antique dealer and left Montreux. This sealed the fate of most of the Nestlé papers. A passer-by picked up two photographs as souvenirs, which are now in the Nestlé company archives.

Like others before it, this account of the life of Henri Nestlé has been laboriously pieced together from fragments of information in a whole range of archives in several countries. There are inevitably a lot of gaps in the puzzle. Most personal documents and possessions have been lost, scattered or destroyed. Infant cereal is no longer produced in Vevey. But the efforts of this pioneer of industrial food production were to bear fruit aplenty.

The Nestlé Group of today with its more than 300 000 employees all over the world owes to Henri Nestlé more than just its name, its bird's nest logo and the invention of infant cereal, outward signs of success which underline the company's global dimensions. More than anything else Nestlé, together with the like-minded founders of the Anglo-Swiss Condensed Milk Company with which the firm amalgamated in 1905, bequeathed a corporate culture which has shaped the Nestlé company ever since. It is a culture characterised above all by a fundamental commitment to quality in a corporation which combines a global vocation in science-based food and nutrition with a respect for regional characteristics.



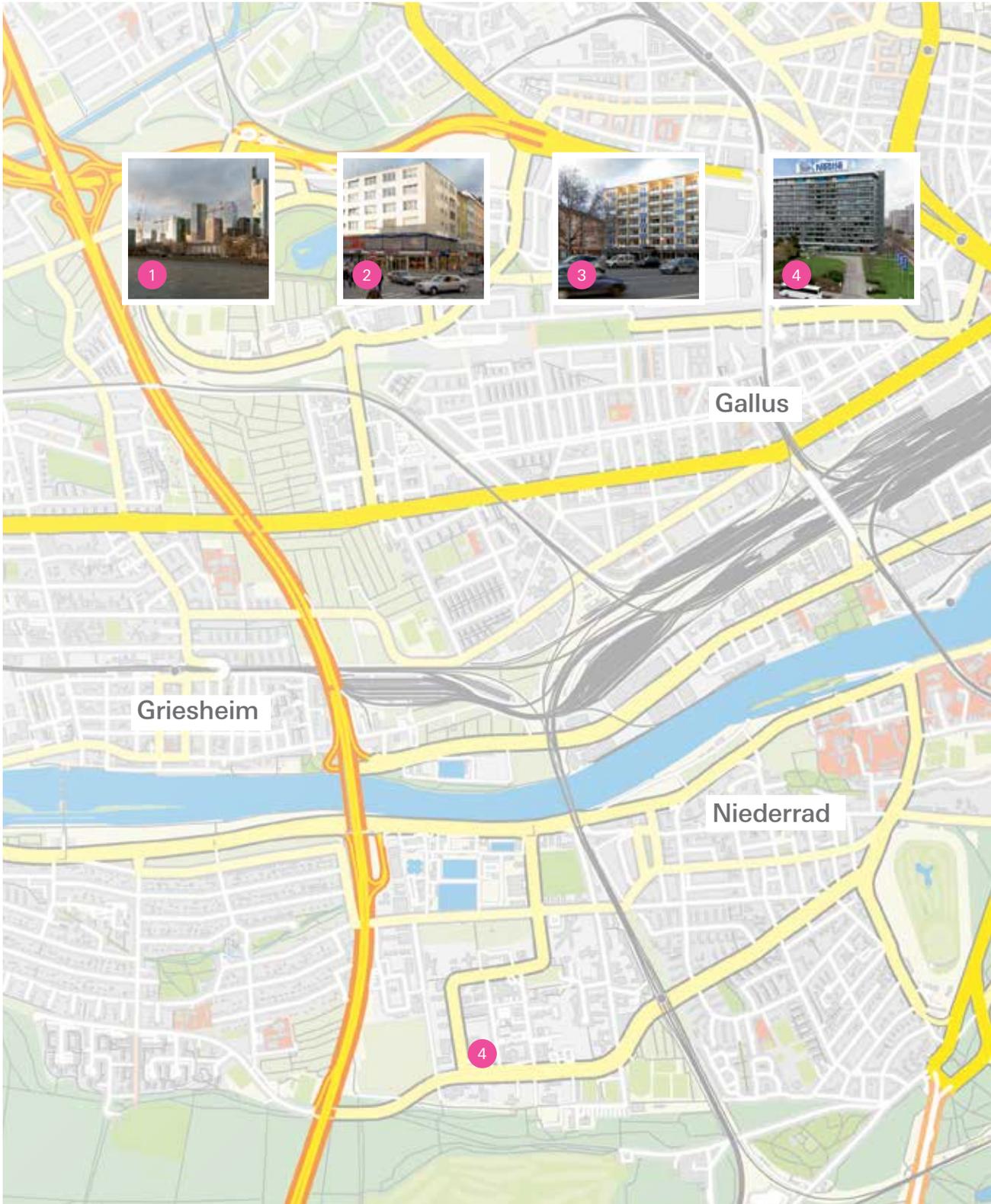
## Frankfurt – Vevey 2014

On the occasion of the 200th anniversary since the birth of Heinrich Nestlé/ Henri Nestlé, we have completed the new edition of his biography with photographs taken of places in Frankfurt and of the Vevey region that, to this day, bear testimony to his life and his work.

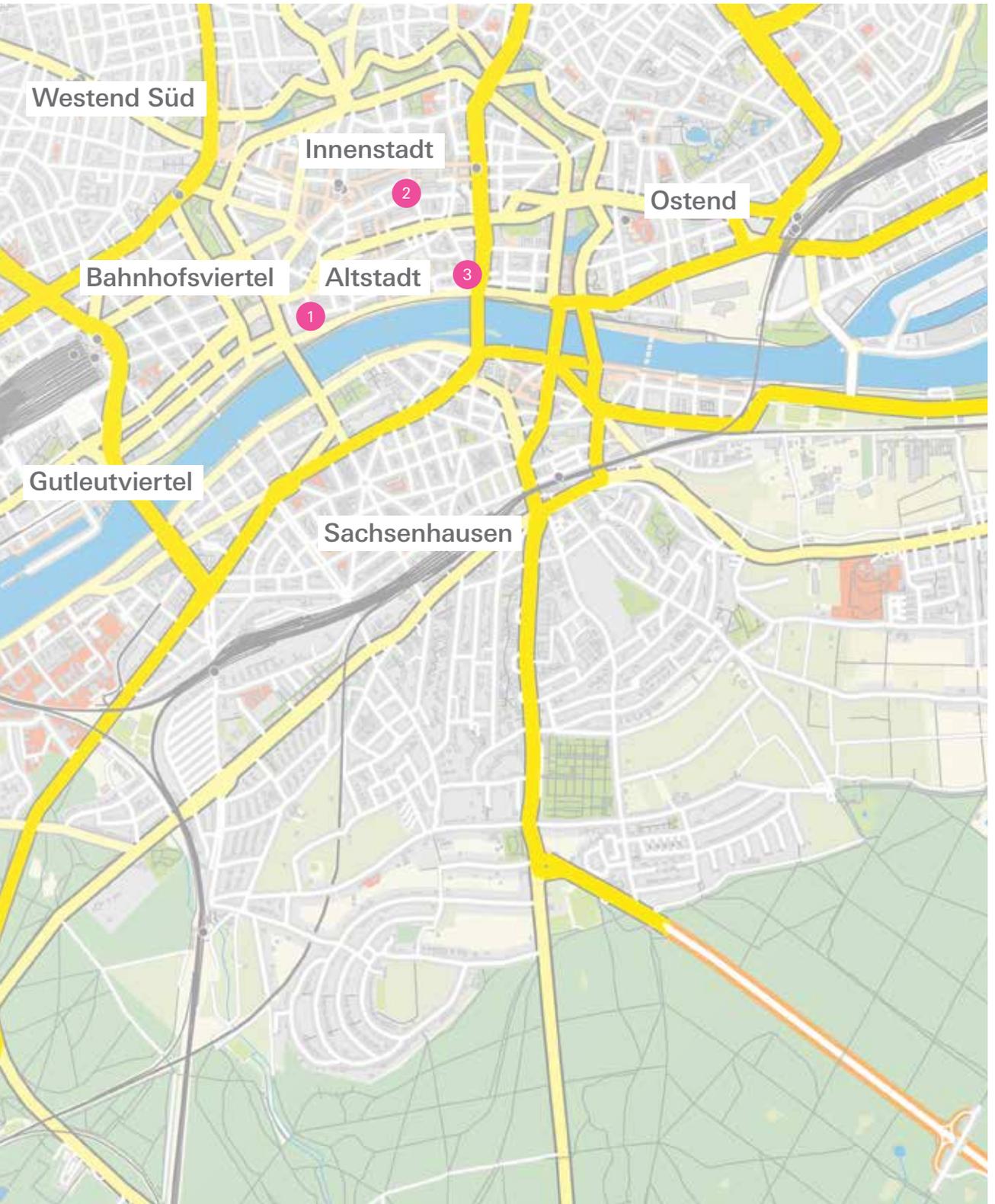
They are views of places that still exist and have become of historical value through the passage of time – the vestiges of these places, replaced through the years by new constructions sited where buildings that had played a key role in the life of Henri Nestlé were to be found, or have been replaced by modern buildings that mark the development of the Company since the death of its founder.

Christian Stuker has taken up the challenge of providing us with a contemporary vision of Henri Nestlé's heritage in the continuity of the visual concept of the book.

The views are easy to situate geographically thanks to the topographical maps and enable those who wish to form their own picture of events to do so, by following in the steps of Henri Nestlé.



Map extract of Frankfurt am Main.





Frankfurt am Main, the native city of Heinrich Nestlé and today a financial hub, was the sales centre of Nestlé in Germany from 1949 to 1970 at the Mainzer Landstrasse 193.





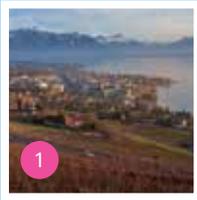
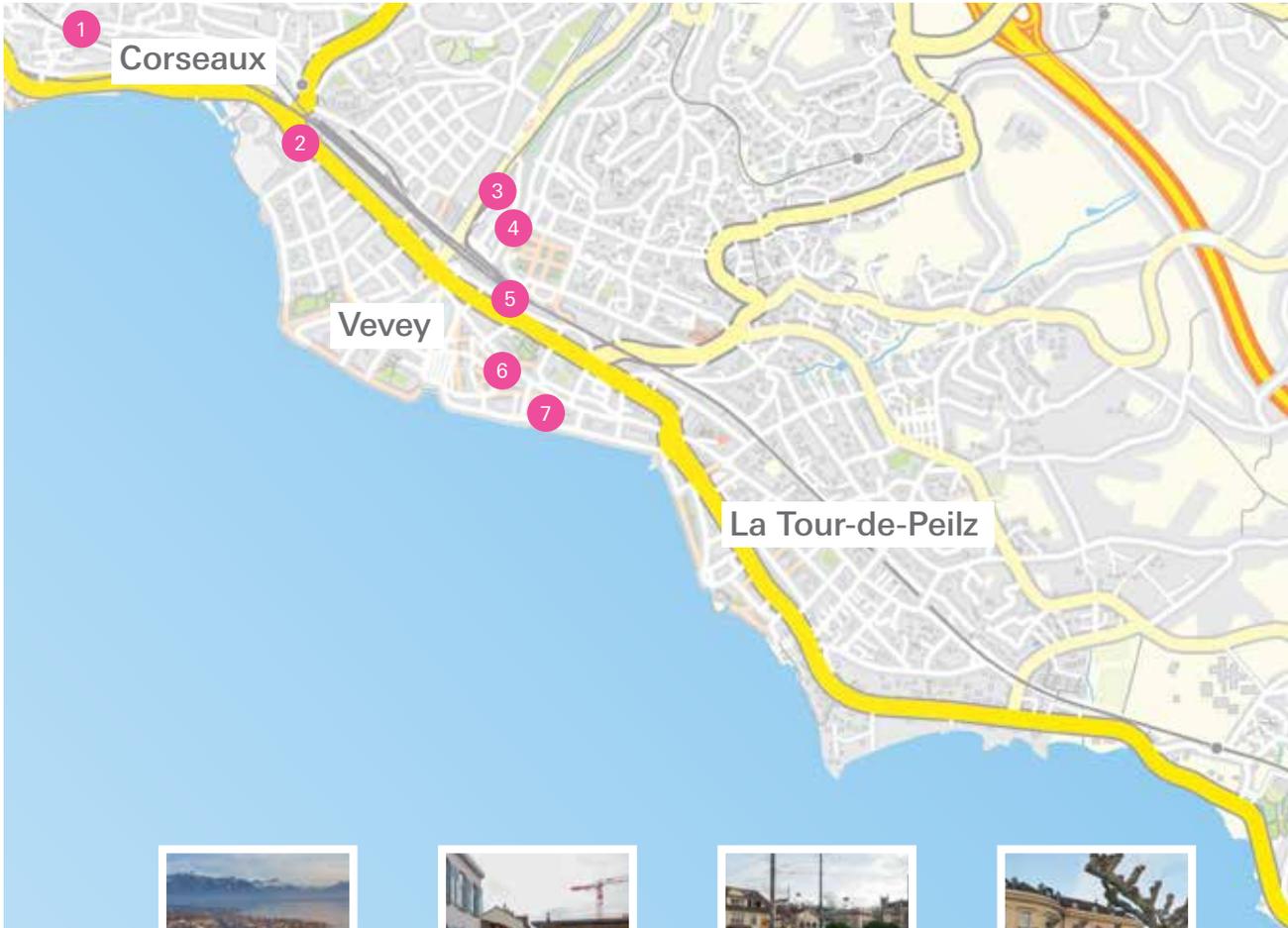
These buildings, at 33 Töngesgasse, Frankfurt (see historical picture p. 20) have replaced the house where Heinrich Nestle was born. Right: The pharmacy "An der Brücke", where Heinrich Nestle completed his apprenticeship (historical picture p. 22), was situated at the crossroads of the Fahrgasse and Brückenhofstrasse.

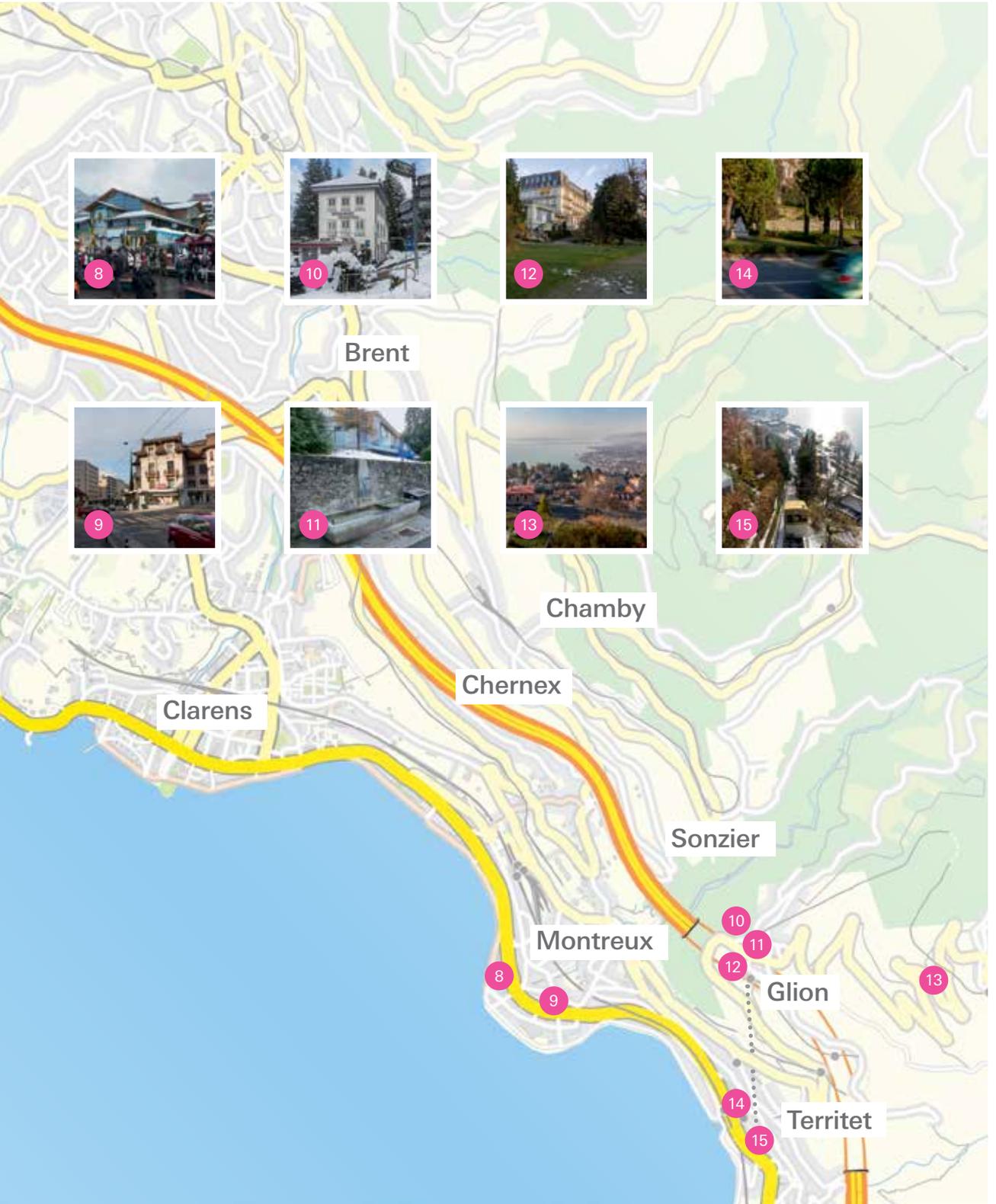




Since 1970, the corporate headquarters of Nestlé Deutschland are located at Lyoner Strasse 23.









The Nestlé International Headquarters, constructed by Jean Tschumi in 1960, are situated along the lakeside at the western side of Vevey on the site of the former "Grand Hôtel". The building was extended on its eastern side in 1978 and a further addition of a rounded annex, known as the WellNes Centre, was made in 2009 (historical picture p. 58).





The square of the Vevey railway station has seen various modifications since 1862, notably a lowering of the ground level at the beginning of the 20th century (historical picture p. 54).  
Right: Rue des Deux-Marchés in Vevey leads to the building which housed the “Pharmacie Centrale” where Nestlé worked between 1839 and 1843 (historical picture p. 23).





The house that Nestlé acquired in 1843 could be found then at 17, rue des Bosquets, Vevey. Today it is at number 15 (cadastral map p. 34).

Right: The houses on this street were bordered to the north-west by the Monneresse canal which was used to drive the mills, then the factories. The extensions to the Nestlé factory were constructed below the slope. In 2016, Nestlé plans to reinvest in this zone to create a meeting and exposition area (historical picture p. 122).





The Alimentarium, a Nestlé foundation, occupies the former administrative centre that Nestlé & Anglo-Swiss constructed at Quai Perdonnet on the site of the “Cercle du Léman” (historical picture p. 40).





The administrative centre of Nestlé, En Bergère, which was inaugurated in 1960, was entirely renovated in 2000.





After the sale of his business in 1875, Henri Nestlé-Ehmant purchased a house in Glion, next to the hotel "Righi Vaudois", which belonged to a friend and compatriot and in which he could spend the summer (historical picture p. 139).





Through a donation in 1889, Henri Nestlé-Ehman contributed to the construction of the covered market in Montreux which hosts the annual Christmas market (historical picture p. 139).





From 1883, the Nestlé-Ehmants spent the winter at Trait-de-Bon-Port, Montreux, now renamed Avenue Nestlé, where they had built a house (historical picture p. 138).

Right: The funicular railway Territet-Glion, constructed in 1883, enabled the Nestlé-Ehmants to move easily between their two homes.





Nestlé-Ehmant subsidised the supply of water from les Avents to the village of Glion, on condition that he could dispose of half of the volume from this well for his own property. Constructed in 1878, the well is still visible opposite his home at the crossroads of Route de Glion and Champs-Fleuri.

Right: The former home of the Nestlé-Ehmants in Glion is now a restaurant.





The "Righi Vaudois" hotel was the first hotel to be constructed in Glion. Nestlé-Ehman made a considerable amount of money available for its extension (historical picture p. 139).  
Right: The Nestlé-Ehman couple are buried at the Parc des Roses, Territet, which is also home to the monument in memory of "Sissi", Empress Elisabeth of Austria-Hungary.



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*Frankfurt am Main. Westbound view from a window of the hotel "Russischer  
Hof" at the Zeil towards the Hauptwache*: 18.



Henri Nestlé, himself an immigrant from Germany, was instrumental in turning his company towards international expansion from the very outset. We owe much more than just our name, our logo and our first infant formula to our founder. Henri Nestlé embodied many of the key attitudes and values that are still part and parcel of our corporate culture to this very day: pragmatism, flexibility, the willingness to learn, impartiality and respect for other people and cultures.