

## Příloha – Výchozí text

### **How one of the most obese countries on earth took on the soda giants**

As debate rages about whether to introduce a sugar tax, this is the story of how Mexico defied its own powerful fizzy drinks industry to impose a tax on soda

Mexicans love their soda. Construction workers go to their jobs in the early morning clutching giant two-litre or even three-litre bottles. Babies in strollers suck on bottles filled with orange soda. In the highlands of Chiapas, Coca-Cola is considered to have magical powers and is used in religious rites.

In fact, Mexicans drink more soda than nearly anyone else in the world; their top three daily sources of calories in 2012 were all high-calorie drinks. Mexico also has by far the world's highest death rate from chronic diseases caused by consumption of sugary drinks – nearly triple that of the runner-up, South Africa. In other words, excessive consumption of soda kills twice as many Mexicans as trade in the other kind of coke that Mexico is famous for.

But Mexico also loves the soda industry. Vicente Fox, who in 2000 became the country's first democratically elected president, had earlier been president of Coca-Cola Mexico and then head of the company's Latin American operations. The symbolism was noteworthy: soda companies – particularly Coke, which controls 73% of the Mexican market (compared with only 42% in the US) – have amassed extraordinary influence over health policy in Mexico.

The consequences of this became apparent in 2006, when the release of Mexico's National Survey of Health and Nutrition revealed that diabetes – the country's leading cause of death – had doubled since 2000. Between 1999 and 2006, the average waist size among women of childbearing age increased by nearly 11cm. And during the same period, obesity among children aged five to 11 rose by 40%. No other country in the world had experienced a rise in obesity of that magnitude – Mexico was on its way to becoming the fattest major country.

The 2006 obesity statistics sounded an alarm in Mexico. The country's then health secretary, José Ángel Córdova Villalobos, approached Juan Rivera, the founding director of the Centre for Research in Nutrition and Health at Mexico's National Institute of Public Health – perhaps the country's most prominent nutrition scientist – and asked him for recommendations to combat the obesity epidemic.

Rivera laid out a programme, involving various parts of the government, to educate the public, encourage behaviour change, and regulate advertising, among other things. "That's very

complicated,” Córdova said. “You’re an academic. I’m a politician – I’m very pragmatic. Choose one thing.”

Reduce soda consumption, Rivera replied. The health survey showed that soda intake had more than doubled among adolescents between 1999 and 2006, and nearly tripled among women. So Rivera worked with a group of Mexican and US nutritionists to produce a diagram shaped like a jug with layers of various drinks to illustrate the ideal balance for daily beverage intake. The idea was to put a poster with the jug in every health centre. “It never happened,” said Rivera. “Opposition from the industry was tremendous.”

As Mexico began to grapple with obesity, and soda’s role in it, the industry began to counterattack with the argument it uses everywhere that soda is under siege. “Obesity comes from taking in more calories than you spend,” said Jaime Zabludovsky, chair of the board of ConMexico, the processed food and beverage producers’ group. “If Michael Phelps eats 5,000 calories a day and swims 10km, there is no problem. If you eat 2,000 calories per day but don’t move, you have a problem. The source can be soda, tortillas, chocolate, sandwiches, fritanga, bagels – there is not any product that in itself causes obesity.”

The idea of balancing calories in with calories out is now the mantra of the soda industry worldwide. An active lifestyle is the solution – not dietary change, and certainly not soda taxes.

Coca-Cola Mexico had been sponsoring youth sporting events for 17 years, but its efforts intensified after 2006 – the next year, for example, Coca-Cola and the government began “Ponte al 100”, a programme to promote the habit of exercise. And since an active life is what matters, who better to help than the industry that knows how to promote sporting events? “We are part of the solution,” said Jorge Terrazas, head of Anprac, Mexico’s beverage industry group.

The soda industry’s contention that activity can protect us from obesity and diabetes is not borne out by research, which has shown again and again that diet is a far more important factor in obesity than exercise. And over the last two decades, the Mexican diet has been transformed. Consumption of beans dropped by half. In the last 14 years, consumption of fruit and vegetables dropped by 30 % – largely replaced by processed food and sugar-sweetened beverages.

In part due to the North American Free Trade Agreement, which took effect in 1994, the availability of processed food has soared. Even in the most remote villages, little stores sell packaged biscuits, pastries, doughnuts and cakes, and sodas and non-carbonated sweetened drinks. When you’re hungry, you can buy a Gansito snack cake and a soda for about a dollar. It’s fast and cheap and delicious.

The evidence is overwhelming that excess sugar consumption is the largest factor in the global obesity epidemic. Excess sugar is also by far the most important driver of diabetes, even among thin people: you need not be overweight to get diabetes. And soda is the worst source of sugar. The high concentration causes a spike in blood glucose. The body responds with a flood of insulin, which in turn can lead to fatty liver disease and diabetes. Also, liquid calories don't trigger satiety. After eating 200 calories of a Gansito cake, you are less hungry. After 200 calories of soda, you are not.

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**What keeps soda executives up** at night is the spectre of a soda tax. They don't worry about lost revenue or sales from a tax – it's the demonisation of their product. Soda is on the verge of becoming the liquid cigarette. So the industry seeks to break the link between soda and disease, and backs research to support that view. Its companies cultivate a health-conscious image – a tactic that, conveniently, also sells beverages. Coca-Cola's promotion of thousands of sporting events in Mexico is also a key marketing and advertising strategy. And if they can't actually win friends, companies spend like crazy to buy them. There was a time when Philip Morris and British American Tobacco did all these things, too. It only put off the inevitable. Sodamakers have a dilemma: every effort to avoid becoming the tobacco industry makes them look more like the tobacco industry.

When the government headed by President Enrique Peña Nieto proposed a soda tax in September 2013, it took the industry by surprise. While the industry had lavished its attention on the health sector, the tax proposal had come from Mexico's finance ministry – part of a larger package of fiscal reforms. "Tax" was the important word, not "soda".

But the industry's shock quickly gave way to confidence. As obesity and diabetes rates soar around the world, a soda tax is one of the top recommendations of global health experts. Several European countries have some version of a tax. But in the rest of the world, the soda industry has kept them at bay. Some 30 jurisdictions in the US have tried to pass taxes or controls on soda; all failed. President Obama considered proposing one in 2009, and it had substantial congressional support, but the might of the soda industry killed it.

In Mexico, the soda industry responded with more than arguments about exercise – it responded with money. To appreciate the reach of soda industry funds, consider an unremarkable public event that took place in July 2013 – a few months before Mexico's congress debated the soda tax. On 8 July, the Mexican Diabetes Association's branch in Monterrey hosted a talk by Jorge A Mendoza López, a local exercise scientist, called "Physical activity for people living with diabetes".

Only one thing about the talk was of note: it was sponsored by Coca-Cola. Mendoza was the first head of the Mexican branch of a global organisation called Exercise Is Medicine (EIM). The group's first founding corporate partner is Coca-Cola. According to Exercise Is Medicine's annual report, Coca-Cola also provided logistical support for Mendoza López's talk.

Dr María Guadalupe Fabián San Miguel is on the board of EIM. She participated in a press conference in December 2012, to denounce the idea of a soda tax. "Let's not punish companies with taxes," she said. "The solution isn't to demonise business, but to educate people."

A similar argument against the soda tax was made by Dr Mercedes Juan López. "The important thing is to educate people so they're aware of the health effects, because you can't force anyone not to drink soda," she said in March 2013. "No food is harmful if consumed in moderation." She admitted that a tax might lower soda consumption, but, she added, "Cigarettes are taxed, and some people still smoke."

Many people in Mexico held these views. What made these women remarkable was not their medical degrees but their positions: when Fabián San Miguel attacked the proposed soda tax, she was the medical director of the Mexican Diabetes Federation. And Juan López was, and still is, Mexico's health secretary.

Before becoming minister, Juan López chaired the board of the Fundación Mexicana para la Salud, the Mexican Health Foundation. She was one of many health officials to go into the government from FunSalud, as the foundation is known. FunSalud dominates health policy in Mexico – and has been a longtime critic of attempts to limit Mexicans' soda consumption and a longtime friend of the soda and processed food industries. FunSalud's nutrition project is the Nestlé Nutrition Fund (Juan was a member of the fund's consultative committee). Its child obesity project is financed by the Coca-Cola Export Corporation and Peñafiel, a Mexican manufacturer of soda and mineral water that is part of the Dr Pepper Snapple Group.

I called the Mexican Diabetes Federation and asked to interview Fabián San Miguel. I was sent instead to Marco Villalvazo, who runs the federation's programme to train diabetes educators. Villalvazo is also one of eight medical experts in Mexico who participate in Together for Wellness, a programme sponsored by Grupo Milenio media company, Coca-Cola Mexico and Coca-Cola's Beverage Institute for Health and Wellness.

Unsurprisingly, Villalvazo didn't think much of the soda tax. "Education is what matters," he said. "Obesity and diabetes are multi-factorial illnesses – one can't demonise one product alone as causing these epidemics. Raising the cost doesn't work." I asked him why the chief educator for the Mexican

Diabetes Federation also works with Coca-Cola. “There is a part of Coca-Cola that makes mineral water and non-sugared beverages,” he said. “That’s the ethical part of Coke. I was working with them in my personal capacity to make short films about hydration.” He said he was not paid for his participation.

Villalvazo has a lot of company. Mexico’s National Council on Science and Technology recently announced a new prize to support research in public health. Its partners are the Coca-Cola Foundation and the Beverage Institute.

Virtually every government panel on fighting obesity includes Coca-Cola, and often other food companies. Armando Ahued Ortega, Mexico City’s secretary of health, has often warned that diabetes is causing the collapse of Mexico’s health system. And dialysis (kidney failure is a major consequence of diabetes) isn’t even covered. If it were, the health system could pay for nothing else. “There goes everything else social security covers – cataracts, cancer, everything,” Ahued said in 2013. Yet the same year he and Mexico City’s mayor presented Coca-Cola with its Health Conscious Organisation award for its “promotion of active lifestyles”.

On the Facebook page of the Monterrey diabetes association, among the 13 organisations the group “likes” are Oxxo, which is Coca-Cola’s chain of convenience stores, and Femsa, Coke’s major Mexican bottler, the largest Coke bottler in the world. Why does a diabetes association “like” a Coke bottler?

It had given the association a large amount of diabetic supplies, said Maribel García Méndez, the director of the association. One of Coke’s other Mexican bottlers, Arca Continental, had provided money for a camp for kids with diabetes. They helped her solve the problem that keeps her up at night: raising money. “I understand that it’s a thin line,” she said. “Most of the [diabetes] organisations receive help from these types of institutions. We accept it because it’s no-strings-attached, and done in the open. The problem is so complex that we have to link ourselves to people who are ready to help – civil society, government and businesses.”

This is not just a Mexican phenomenon. Coke has given millions of dollars to various health organisations in the US, including dieticians’ and paediatricians’ groups. But a backlash has begun, and some are severing their relationship with Coke. Not so in Mexico – and industry money has a far greater impact in countries, such as Mexico, where everyone who works in health stays up at night worrying about money.

Yet the month after proposing a soda tax, Peña Nieto signed it into law. The soda industry was confounded by three things: a government desperate for tax money, the rise of civic groups that creatively countered the industry’s political pressure, and a giant infusion of cash.

After Mexico, the British overseas territory of Saint Helena passed a tax, then Berkeley, California – an island in its own way – then the US Navajo nation, then Chile, then Barbados. Many more countries are contemplating following. In Britain the conversation had been largely a soliloquy conducted by Jamie Oliver, who has raised the price of soda in his restaurants, with the money going to children's anti-obesity programmes. Now, however, even the British Medical Association has endorsed a soda tax and Public Health England, a government body, just released a report recommending one, among many other measures.

Around the world, people are watching Mexico. Activists want to know how their Mexican counterparts did it. Governments seek evidence on the tax's effects. As for the soda companies, they are looking at Mexico and asking how the hell it happened. And, they fear, if it could happen in Mexico, then it could happen anywhere.

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**When the 2006 nutrition study came out**, Alejandro Calvillo was starting a new organisation that he called El Poder del Consumidor – Consumer Power. Calvillo was not interested in traditional consumer advocacy work, collecting stories of fraud or bad service. He had spent 12 years at Greenpeace Mexico, five as its leader, and he founded El Poder to be a kind of Greenpeace for consumers – to fight industry pressure and win pro-consumer policies.

"We had lived till 2000 with one party in power for more than 70 years," Calvillo said. Before Vicente Fox became president in 2000, the Institutional Revolutionary party (PRI) had won every election since 1929. "The PRI had enormous control. Civil participation was very difficult to build – we lacked practice in democracy. It was important to create citizenship, and I felt a consumer organisation worked on issues that are very immediate for people."

Calvillo is 57, a philosopher by education. He is an unlikely leader and spokesperson for a movement: sober, soft-spoken, thoughtful. In what is still a formal society, he wears jeans to press conferences. He looks profoundly uncomfortable being interviewed, but he looks uncomfortable a good deal of the time. He knew that El Poder needed to focus on just a few fields. The national nutrition study infuriated Calvillo, particularly the rise in child obesity. Food would become one of El Poder's areas of work, alongside transport. What Calvillo was trying was radically new.

"There is no tradition in Mexico of listening to civil society on the issue of food," said Rivera. "Industry is seen as really important; they have to be consulted. But it's been very rare that anyone talks to civil society. The tradition here is that aristocrats don't talk to anyone who isn't of their social class. Civil society is seen as making trouble."

"Well, it's true: they are troublemakers," he said, smiling. "But a democratic society has to listen to them."

El Poder gradually amassed victories. It created an informal network of sister organisations – groups that worked on health, environment, small agriculture, indigenous rights – which now form the Nutritional Health Alliance. Calvillo and his compadres played a major role in winning new official recommendations to keep junk food out of schools, and a government promise to limit advertising on children's television.

El Poder brought focus, organisation and a voice to the issue of Mexico's diet. What it couldn't bring was money. El Poder's headquarters is in a working-class neighbourhood in Mexico City's south, a few doors from Calvillo's house, with roosters, cobbled streets and colourful murals; in 2008, when funds were about to run out, he kept the organisation alive by selling his family's car. El Poder has received small grants from Oxfam UK and the Heinrich Boll Foundation (associated with the German Green party). Calvillo had also been given a personal grant from Ashoka, a US "incubator" for social entrepreneurship. He and his wife, Elaine Kemp, who designs El Poder's campaigns and documents, eventually had enough money to buy another car. (Calvillo still travels mostly by microbus and metro – highly unusual for Mexican elites.) But raising the kind of money required to defeat the soda industry in a fight over taxes seemed impossible – until Michael Bloomberg, the billionaire mayor of New York City and food nanny to the world, stepped in.

It is hard to determine the impact on obesity and disease, in part because so few sugar taxes have been passed

The World Health Organisation calls soda taxes the most effective strategy for improving diet (along with subsidising fruit and vegetables). The evidence that a soda tax can reduce obesity and disease, however, comes largely from theoretical models.

Soda taxes are hard to study. It's difficult to isolate their effects, since countries tax many foods. In the few years before Mexico passed its tax, Finland, France, Hungary and a handful of smaller countries and jurisdictions put new taxes on soda – but all three countries also taxed diet soda or mineral water (their aim was revenue, not health). Thirsty shoppers in Finland, France and Hungary have no economic incentive to avoid sugary drinks.

The available evidence shows that soda taxes reduce consumption – and when they are removed, as in Denmark in 2013, consumption rises – although studies suggest that a tax of less than 20 % has only a small effect. What is harder to determine is the impact on obesity and disease, in part because there are so few cases where soda taxes have been passed.

No failure to pass limits on soda has inspired as much schadenfreude as New York City's. When he was mayor, Bloomberg tried to ban cups larger than 16 ounces (473ml), but the courts overturned the ban after a fierce campaign by the industry – which had the support of some unlikely allies, including the Hispanic Federation and the National Association for the Advancement of Colored People (NAACP), both of which had received Coke money. The conservative commentator Jeff Stier summed up one widely held view of Bloomberg's policies: a "meddling, busy-body approach".

You bet, says Bloomberg. In 2011, Bloomberg's charitable foundation, already a major funder of tobacco control programmes in low- and middle-income countries, decided to take on soda. Mexico was alluring, especially since a new president was about to take over. The foundation, called Bloomberg Philanthropies, looks for strong local organisations to partner with, and Calvillo's group was an obvious choice. "Experts around the world talked about Alejandro and how strong El Poder was," said Kelly Henning, who runs the foundation's public health programmes. "He really looks to the evidence, and is a very good collaborator with others."

In 2012, Bloomberg Philanthropies began a \$10m, three-year programme in Mexico to reduce soda consumption. For the first time, the financial power of Mexico's soda industry faced a serious challenge.

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**On a sunny morning this July**, Calvillo stood in a light-washed classroom at the National Institute of Public Health to dissect the soda tax campaign. Anabel Velasco, a researcher there, had invited him to speak to her graduate students in nutrition. As he stood in front of the class he seemed totally at ease. Here, he was a rock star. After the talk, students came up to him to show him their own research or give him a résumé.

For the first six years of El Poder's life, the group publicised its issues only through free media coverage. Calvillo gave, and still gives, nerdy press conferences, showing slides with numerous footnotes, and he often begins interviews with a recitation of facts and figures.

But he alternates wonkery with street theatre. In 2012, for example, reporters were invited to gather outside the offices of Mexico's health authority. An actor dressed like one of the polar bears that figure in Coke ads limped up, wearing a prosthesis on one paw, a dialysis bag and tubing. He was carrying a bottle of soda, which he poured into a rubbish bucket. At least 41 outlets covered the stunt, including China's national news agency.

Six months later, Calvillo and his colleagues in the Nutritional Health Alliance dressed actors like police, who came out, faces obscured, to announce the arrest of the capos of the "Junk Cartel" for

the crimes of manipulating and tricking children. The criminals included the polar bear, alias “La Coca”, Tony the Tiger, alias “El Tigre” or “the Lord of Sugar”, and Ronald McDonald, alias “El Payaso” – the clown. Four actors in costumes were then paraded in front of reporters in handcuffs. That, too, got widespread publicity.

The Bloomberg money allowed Calvillo to buy ads for the first time. The alliance created a very sober ad featuring doctors talking about children with diabetes. It requested space for the ad on the popular 10.30pm news programme of Televisa, Mexico’s major TV network. “Sorry, no space,” Televisa replied – and there was no space on any of the channel’s other programmes either.

The alliance was also refused at Mexico’s other major broadcast network, TV Azteca, at the cable network Milenio TV, and at a major outdoor advertising chain, which at least gave a reason, Calvillo said: it had a policy of not upsetting important clients. (A spokesman for TV Azteca said the ad was rejected because the doctors did not display their professional licences on screen, and the images were too graphic. Other media did not respond to inquiries.)

But the cable networks Fox Sports and CNN took the ad, and it went on YouTube – “see what the networks censored!” – where it got a quarter of a million hits.

The ad that came to symbolise the campaign was called “12 Spoonfuls”. “We had been doing nutritional workshops with parents, and they were always shocked to learn how much sugar was in a soda – the least of them had 12 spoonfuls,” said Calvillo.

This turned into a poster showing a hand thrusting a soda at two children. “Would you give them 12 spoonfuls of sugar?” asks the text. “Then why would you give them a soda?”

In one of the TV spots, a couple sat with a bowl of sugar in front of their unwilling daughter, using every parental “open wide” trick to spoon sugar into her mouth. Focus groups conducted recently – two years after the campaign – showed that nearly everyone still remembered these ads.

As Calvillo showed the students his ads, a middle-aged student raised her hand. “Is that true? Twelve spoonfuls?”

Calvillo smiled. “Delaware Punch has 15,” he said. There were gasps from the students.

The soda industry fought back against Calvillo’s campaign mainly with ads promoting what has now become its global theme: balance your calories with exercise. Other ads focused on the economic consequences: Fernando Ponce, then head of Anprac, the beverage industry association, warned that 10,000 jobs would be lost in the short term, and 20,000 in the medium term.

But the industry's most interesting tactic was to focus on Bloomberg himself: poster and newspaper ads referred to the tax as "the Bloomberg tax" and "a tax promoted from a foreign country".

"Alejandro Calvillo complains about multinationals, but receives money from the US," warned one ad. "And you? Are you going to let a gringo tell you what to consume? What are Michael Bloomberg's real interests in Mexico? A gringo wants to charge you the taxes he couldn't charge there. What interests are behind El Poder del Consumidor?"

The alliance's own research (paid for, of course, by Bloomberg) showed that these ads had little impact: an anti-gringo strategy is apparently not effective for an industry commanded by Coca-Cola. In fact, that strategy was a better fit for Calvillo's side. Mexico is the one country that rivals France in its resentment of US cultural and corporate dominance, which has reached new heights since Nafta. Mexican small agriculture is dying, replaced by big agribusiness. The Mexican indigenous diet is disappearing with it.

For the alliance, the soda tax was a way to promote both health and Mexicanness. Calvillo talks about encouraging Mexicans to go back to the traditional Mesoamerican diet of fruit, vegetables and grains such as amaranth — "considered one of the best in the world," he said.

For some of Calvillo's allies in the alliance, revitalising the traditional Mexican diet was their major goal. One was Yatziri Zepeda, an environmental economist, who runs Proyecto AliMente – which she finances with her part-time research job.

Zepeda's passion for a soda tax came in part from the three years she lived in Chiapas, the poorest state in Mexico – and the land of Coca-Cola. Indigenous regions of Chiapas have the highest rates of Coca-Cola consumption in Mexico, possibly in the world. Billboards on the outskirts of towns show a woman in native dress holding a Coke bottle, with "Welcome to Zinacantán" at the top and the Coca-Cola slogan "Open happiness" below. Coke is used in religious rites; burping rids the body of evil spirits. In Chiapas highland churches, Coke bottles line the aisles and even decorate the altars.

"We aren't speaking out against soda," Zepeda said. But she is trying to promote and celebrate alternative traditional drinks. In April she and colleagues organised a festival of pozol, an indigenous corn drink, the kickoff of a campaign called, "It's healthier to eat like Mexicans." In the highland town of San Juan Chamula, villagers gathered to listen to music and get reacquainted with native foods and drinks.

The most enthusiastic taster at the gathering, however, was far from home: Jamie Oliver, who came to film his anti-sugar documentary Jamie's Sugar Rush. "Mexico doesn't need to look outside its

doors to find a solution to diabetes and obesity,” he declared to the crowd, holding a cup of pozol high. “The solution is right here, in-house, and it’s traditional foods.”

The irony is that ancient Mexican cuisine has never been more fashionable – but in the sleek restaurants of Mexico City, not the highlands of Chiapas. “Traditional Mexican cuisine is so relevant in privileged communities,” said Zepeda. “But in rural communities, everything from here is not cool.”

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**The Mexican congress is normally** home turf for beverage industry executives and lobbyists; here they are among friends. “When we want help with a campaign, they are here to help,” said Marcela Torres Peimbert, a senator from the pro-business National Action party (PAN) – which was almost uniformly against the tax. Although Peña Nieto’s party, the PRI, is famous for its discipline, many PRI legislators didn’t like their president’s proposal either; many people they represent work in bottling and selling soda, and the PRI also received soda industry largesse.

Mexico’s leftist party, the PRD, did support the tax. And the industry had never before faced an opposition with Bloomberg money. “That levelled the playing field,” said Ricky Arango, who heads Polithink, a hip public-interest lobbying firm Bloomberg hired to persuade legislators. “It allowed us to compete one-on-one with the beverage industry. Without it we would not have had money for polls and publicity.”

Torres Peimbert became the tax’s most unlikely champion, though her party, the PAN, opposed the tax: she was not a businessperson but a psychotherapist, and her uncle had diabetes. “But every family has a relative with diabetes.” She said the president of the Mexican senate, Miguel Barboza, just had his right foot amputated.

Torres, with the support of the Nutritional Health Alliance, first proposed a tax of two pesos (8p) per litre, but they knew it would be bargained down. “It was convenient for the government that I’m a legislator from the opposition,” Torres said. “It’s difficult to ask for a tax hike, but it’s different when it’s civil society asking and I was their spokesperson. But my party criticised me. They said, ‘We’ll be blamed for the tax and the PRI will get the money to spend.’ In my state, the owners of the bottling plants don’t talk to me.”

She sniffed. “I don’t miss them.”

The beverage industry was so fearful of having soda singled out for demonisation that it proposed changing the tax to a levy on sugar. The rest of the food industry was furious, according to Jaime

Zabludovsky, chairman of the board of the industry group ConMexico. The soda industry dropped the proposal. Legislators, however, thought so much of the idea that they proposed expanding the soda tax to junk food.

Polithink needed to convince legislators it was politically safe to vote for a tax increase. The group hired an independent polling firm, which asked people: would you support a tax if the money went to drinking fountains in schools? (This was disingenuous, as you cannot earmark tax money in Mexico, and in fact, the drinking fountain programme is only now getting started.) In large part because of Calvillo's public campaign, polls found that 70% of the public supported the soda tax, and an even higher percentage agreed it would change their behaviour.

On 31 October, Peña Nieto announced the new one peso-per-litre soda tax (equal to about 10% of the pre-tax price), and an 8% tax on junk food, in a ceremony unveiling a new strategy for combating obesity and diabetes. The plan was heavy on exercise promotion and has produced ubiquitous (and ineffective) posters of young, slim, smiling Mexicans pointing at the camera and saying, "Go to your clinic and have a checkup today!" On the stage with Peña Nieto at the ceremony was Brian Smith, president of the Latin America Group at Coca-Cola. Smith talked about Coke's nutritional education and promotion of physical activity, including a programme Coke was supporting with Mexico's sports commission. He didn't mention the soda tax.

The tax took effect on 1 January 2014. A year and a half later, all sides were engaged in another battle. The industry desperately needed to show that the tax had failed. "This is a regressive tax," said Jorge Terrazas, the new head of the beverage industry association. "It's not just that 64% [of tax revenue] comes from people with few resources. They didn't stop drinking soda. But they stopped buying personal hygiene and home items."

Terrazas was talking about data that had just come out from the National Survey of Household Income and Expenditure. Drinks, in fact, were the only category of spending that rose between 2012 and 2014. The industry seized on this data – but the survey is not a measure of soda sales. It can't separate the effects of the tax from background noise, such as economic changes. And "drinks" includes all cold beverages, including alcoholic drinks. Mexicans could be buying more bottled water, or drowning their sorrows in beer.

Industry executives felt their strongest argument was the high level of tax collected. Treasury officials had predicted the government would collect 1.2bn pesos from the soda tax in 2014. It actually collected 1.9bn. "That is the best argument that the tax did not do what it was supposed to do," Zabludovsky said – arguing that the high rate of revenue suggested consumption had not decreased. "The more successful it is as tax collection, the less successful it is as a health measure."

That's not how the finance ministry sees it. Rodrigo Barros, the ministry's head of tax policy, said that the initial revenue prediction for the tax had been very conservative; it was a projection based on existing VAT collection on soda, which is taxed at numerous points. The new tax is collected only from factories and importers. "These are only a few large plants, and it makes collection much easier," he said. "Tax evasion rates are lower." The high level of tax collected could reflect lower rates of tax evasion, he said.

For Calvillo's side as well, the question of whether the tax succeeded was all-important. Bloomberg funded research conducted by Rivera at the National Institute of Public Health along with Barry Popkin, a prominent nutritionist at the University of North Carolina. The study controlled for other factors affecting soda purchases, and found that compared with pre-tax trends, sales of taxed drinks fell by 6% in 2014. Sales of bottled water were up by 4%.

The decline started slowly but accelerated: by December 2014, soda sales were down 12% from December 2013. And the drop was greatest among the poorest Mexicans – by December they were buying 17% less sweetened soda than the year before. (Terrazas was right – the tax does affect the poor disproportionately. But so does diabetes.) In September, Mexico's national statistics institute released data on beverage consumption showing that Rivera's findings actually slightly understated the soda tax's success.

The battle continues. At the end of October, the lower house of Mexico's congress, the chamber of deputies, passed an amendment that would have halved the tax for beverages with less sugar. But the political climate has now shifted; after the vote, all the parties scrambled to deny responsibility for watering down the tax – "The industry did it," said one PRI deputy – and the senate quickly overturned the amendment.

Calvillo, meanwhile, is campaigning to go further. In interviews and press conferences he talks about doubling the soda tax and removing the VAT on bottled water; a soda would then be twice the price of a same-size water. And he's campaigning to go wider. "This is not just a battle for the perceptions of Mexicans," he said. "The governments of Colombia, Ecuador, other Latin American countries, South Africa, India – they're all looking at a soda tax. The world's attention is on Mexico."