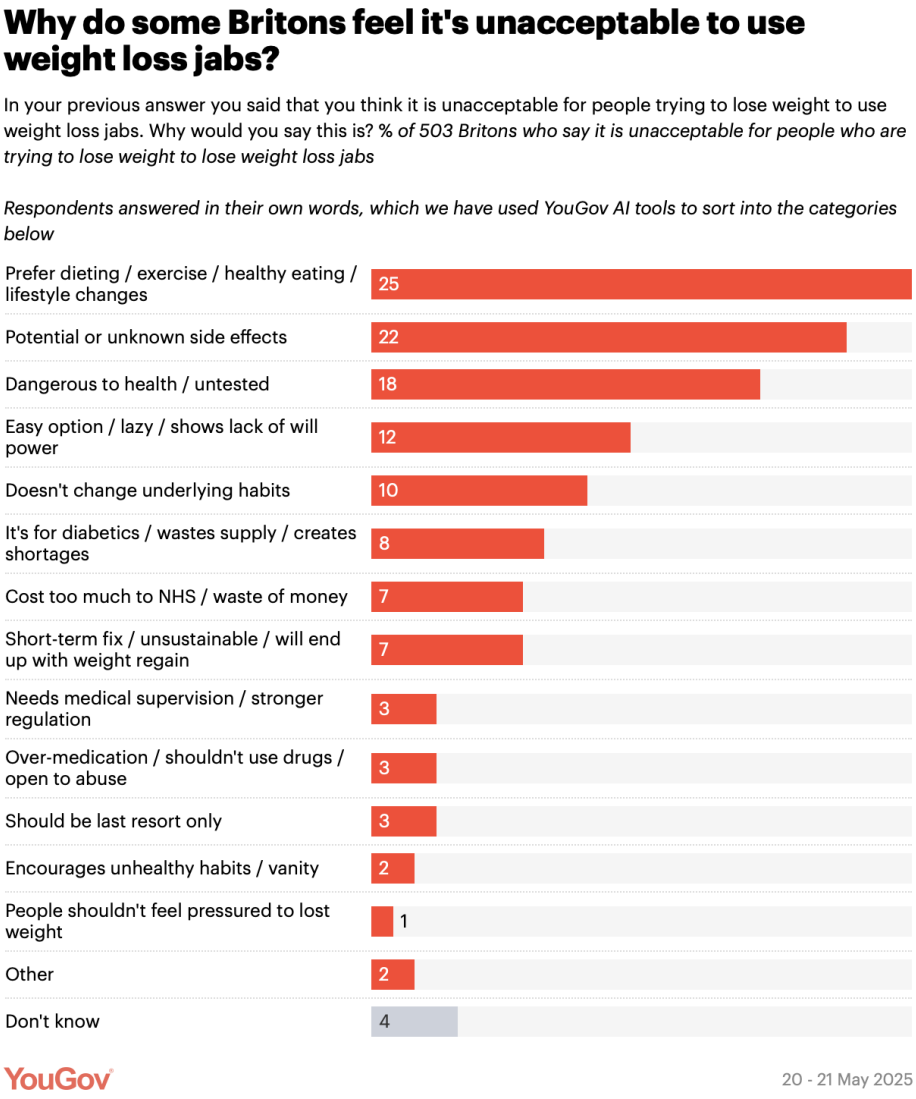
PART 1 – WEIGHT LOSS JABS

DOCUMENT 1



YouGov, "What do Britons think of weight loss jabs?", 17 June 2025

DOCUMENT 2

In a World of Addictive Foods, We Need GLP-1s

Dr. David A. Kessler, *The New York Times*, May 7, 2025 (abridged)

Throughout my life I've been fat, thin and various sizes in between. Since I was a kid, I've gained and lost weight repeatedly, putting on 20 pounds, taking it off, putting on 30 pounds and then losing it again. It has been a cycle of despair.

The fact that I'm a doctor, was a dean of two medical schools and ran the Food and Drug Administration for six and a half years was of no help to me. Like millions of others, I was caught between what the food industry has done to make the American diet unhealthy and addictive and what my metabolism could accommodate.

We may now be at the brink of reclaiming our health. New and highly effective anti-obesity medications known as GLP-1s have revolutionized our understanding of weight loss and of obesity itself. These drugs alone are not a panacea for the obesity crisis that has engulfed the nation, and we should not mistake them for one. But their effectiveness underscores the fact that being overweight or obese was never the result of a lack of willpower.

It is the result of biology instead, and that is why these drugs work. They help people feel full after eating and reduce the cravings that are central to our addiction to the irresistible, highly processed, highly palatable foods that have glutted our shelves over the past five decades. For many of us, our biology makes the pull of these ultraformulated foods nearly impossible to resist.

These foods typically are called ultraprocessed, but I refer to them as ultraformulated because they have been engineered to manipulate the brain's reward system. These foods have become the new cigarette and, similarly, have resulted in a health catastrophe.

Forty percent of American adults are obese. These foods have contributed to a rise in diseases characterized by visceral fat, or what I call toxic fat — fat that accumulates in our abdomens and surrounds the liver, heart and pancreas. These chronic illnesses include cardiovascular disease, stroke, diabetes, cancer and probably some forms of dementia. Visceral fat and obesity more generally are among the reasons that Americans have an average life expectancy that is four years shorter than that of people in other large, industrialized countries.

By the time many people reach old age, doctors are often treating multiple health complications that stem in large part from a lifetime buildup of visceral fat. Doctors typically treat these conditions piecemeal, with drugs that lower cholesterol, reduce high blood pressure and control diabetes. GLP-1s could be an alternative to this piecemeal treatment because they seem to improve so many markers of health.

The Trump administration recently rejected a plan by the Biden administration to expand access to these drugs by requiring Medicare and Medicaid to pay for them, a decision that will deny access to millions of people who otherwise cannot afford them.

This is a mistake. GLP-1s appear to modify addictive brain pathways that are activated by ultraformulated foods, helping people to change their body weight in a decisive way. Traditional dieting might result in a weight loss of 5 percent to 7 percent. The new GLP-1 drugs more than double that.

Even so, these are not magic medications. Prescribing them without other interventions, like healthier eating, exercise and behavioral therapies aimed at developing other lasting lifestyle changes, isn't good medical care. Unfortunately, most doctors are not trained in nutrition or weight management. And whether patients can safely and practically use these drugs over the long term is still largely unknown.

Numerous studies affirm a truth so many of us have experienced: Sooner or later, almost every weight-loss plan fails. Even GLP-1 medications have a high dropout rate. The data suggests that most people take these drugs for less than a year and that after they stop, their lost weight is mostly regained.

One of the reasons people stop taking GLP-1s is that they are expensive and may not be covered by insurance. Another reason is the side effects. They work by causing us to eat less, in some cases much less, which can be dangerous. They keep food in the stomach longer, which can induce feelings of fullness but can also generate feelings of nausea or distress.

Pharmaceutical companies must be more transparent about these reactions, which counterbalance the rewarding and addictive properties of food and reduce the so-called food noise that plays in the heads of people who struggle with weight. The key is that people on these medications can learn to eat less. This is one of the great benefits of these medications.

What's troubling is that the Food and Drug Administration approved GLP-1s for long-term use without requiring companies to conduct long-term studies on how these drugs are used in the real world. It is not realistic to believe that people will stay for life on expensive drugs with side effects. Research is needed to show how patients can safely stop taking them and to better understand the risks of rapid weight loss when appetite is suppressed. Combining treatment approaches under the care of well-trained obesity medicine doctors and dietitians may be the best long-term strategy. […]

• *Dr. Kessler is a former commissioner of the Food and Drug Administration.*

DOCUMENT 3

Why Weight-Loss Drugs Alone Won't Make Us Healthy

William Warr, *Time*, September 15, 2025 (abridged)

We are entering a new era of obesity. The science of weight loss has changed forever: Drugs like Ozempic, Wegovy, and Mounjaro are helping millions shed weight they once thought impossible to lose. At the same time,

research is revealing the role of ultra-processed foods in driving obesity, diabetes, and heart disease, even beyond calories alone.

But for all the breakthroughs, governments are stuck. Caught between the pharmaceutical revolution on one side and a trillion-dollar food industry on the other, they face a defining question: Will we settle for treating obesity, or will we finally tackle its causes?

Because here's the uncomfortable truth: Weight-loss drugs are extraordinary, but they are not a solution on their own.

GLP-1 drugs have been nothing short of miraculous for many. Originally designed for diabetes, they suppress appetite and help people lose 15–20% of their body weight. Patients with Type 2 diabetes are seeing their blood sugar normalize. Rates of heart attacks and strokes are dropping. They may well be beneficial for neurodegenerative diseases like dementia. Some estimates suggest that, if rolled out at scale, GLP-1s could save up to three million lives every year.

And now, with cheaper versions beginning to enter the market in India, China, Canada, and other countries, the reach of these drugs is expanding faster than anyone predicted.

But here's the dilemma: If governments focus on prescriptions instead of prevention, they risk hardwiring obesity into the next generation.

We now know that ultra-processed foods (UPFs)—industrial combinations of refined starches, seed oils, sugars, additives, and flavorings—don't just make us gain weight. They change our biology. They spike blood sugar, drive inflammation, disrupt satiety signals, and, in many cases, are engineered to keep us eating well past the point of fullness.

In the U.K. and U.S., more than 60% of the average diet now comes from these foods. That's school lunches. Hospital vending machines. Cheap supermarket staples. And the problem isn't just access; it's environment. These products are everywhere, marketed relentlessly, and often cheaper than whole foods.

Yet the science is not without controversy. Some researchers argue that UPFs are too broad a category to be useful, lumping together yogurts and whole-grain breads with potato chips and candy. Others suggest that much of the harm comes not from "processing" itself but from factors we already understand—sugar, salt, fat, energy density, and even texture and speed of eating. In a landmark study at the National Institutes of Health, people ate 500 more calories a day on an ultra-processed diet than on an unprocessed one—even when nutrients were matched—likely because the foods were softer, faster to eat, and more energy-dense.

The precise mechanisms are still debated. But the bottom line is not. Populations that eat more UPFs get sicker, younger.

GLP-1s can quiet the biological drive to overeat. But they can't change the reality that children are growing up in a food environment designed to make them sick.

This is the bind policymakers now face. On one side are pharmaceutical companies pushing for broader access to life-changing weight-loss drugs. On the other, food giants are lobbying hard against restrictions on advertising, warning labels, or taxes on sugar and salt. And in the middle: governments paralyzed by the fear of being accused of running a "nanny state." […]

None of this is about shaming individuals. Obesity isn't a failure of willpower; it's a predictable response to an environment designed for overconsumption.

The question is whether we want to normalize that environment and rely indefinitely on weekly injections, or whether we want to build a world where fewer people need the drugs in the first place.

The stakes aren't just personal. Obesity already costs the U.S. economy an estimated $1.4 trillion a year in lost productivity and health care costs. In the U.K., the figure is almost £100 billion. Those numbers will only grow unless we shift from reactive care to prevention.

I'm not anti-drug. Far from it. GLP-1s are one of the most exciting medical breakthroughs of the last half-century. They will save millions of lives.

But drugs alone won't create a culture of health. They won't teach children how to cook. They won't suddenly make our kids immune to junk-food ads. They won't stop aggressive lobbying that keeps the least healthy calories the cheapest.

This moment—this collision of science, food, and politics—is a chance to do something bigger: to make the healthy choice the easy choice, for everyone.

If we miss it, we risk creating a future that looks much like our present: where obesity is managed, not

prevented.

Warr is a global health policy expert, visiting professor at Imperial College London, and an honorary fellow at Oxford. He previously served as the senior adviser on health and technology to the U.K. Prime Minister

DOCUMENT 4

Ozempic for All

Emily Oster, *The Atlantic*, October 20, 2025 (abridged)

An estimated 100 million adult Americans—more than 40 percent of the population—are classified as obese. This is a massive health crisis that will claim many lives over the next decades. As is well known, drugs now exist that can dramatically reduce obesity and its related health risks. But most of the roughly 37 million adult Americans on Medicaid—an estimated 14 million of whom suffer from obesity—do not have access to these drugs, known as GLP-1s. The reason is simple: These medications are hugely expensive, and the cost of covering them could seriously stretch state budgets in the short term. America should do it anyway.

GLP-1s are near-miracle drugs. On obesity alone they make a huge difference—resulting in about 15 to 20 percent weight loss in randomized trials. And although weight does not define health, and BMI is an overused number, the data are clear that obesity is a risk factor for a variety of diseases and is associated with higher mortality. Individuals experiencing obesity at age 40 have a life expectancy, on average, three to four years shorter than those who are in the normal weight range.

What's more, these medications are also showing substantial benefits for both related and unrelated conditions. They have been used since 2005 to treat diabetes, and have more recently been approved to treat certain liver and kidney diseases as well. New evidence suggests that they may reduce alcohol consumption among those with a drinking problem. A summary paper comparing diabetics on a GLP-1 with those on other medications found that those taking a GLP-1 saw greater reductions in substance abuse, dementia risk, cardiovascular disease, and other conditions.

Some, especially within the MAHA movement, have criticized the widespread use of these medications, arguing that doctors and patients should focus more on diet and exercise as mechanisms for weight control. Whatever the benefits are of this individualized approach, it is impractical at the population level. We have mountains of evidence that lifestyle-based weight-loss interventions are not effective in the long term for the overwhelming majority of people.

GLP-1s are much more likely to succeed at scale. As of last year, an estimated 15 million adults were taking these medications. The millions of eligible adults on Medicaid, however, are mostly not covered, and this population generally cannot afford to pay out of pocket. Although state Medicaid programs are required to cover most FDA-approved medications, Congress has exempted weight-loss medications from this requirement because of cost concerns. As of August 2024, only 13 states covered these medications to treat obesity under Medicaid. The inequality in access itself creates further health inequalities, effectively denying individuals living in poverty a medical treatment that would improve their health and longevity. Ensuring coverage for these drugs by Medicaid in all states would make them more accessible and improve lives.

The primary objection to doing so is cost. There is substantial price variation, but the out-of-pocket cost for Wegovy, for example, is about $850 a month. At that price, if 10 percent of individuals with obesity who are covered by Medicaid took up these medications, it would cost about $1.2 billion a month, or $14.3 billion a year. Total Medicaid yearly spending is about $918 billion, so this would be a sizable increase. If *every* adult on Medicaid with obesity took up these medications, that would cost an estimated $143 billion a year. This is an enormous increase, and worries about it are why Congress has not required states to cover these drugs.

These budget concerns reflect the scope of the problem and the value of these medications in addressing it. If the medications were useless or the problem was small, then we wouldn't worry so much about the cost. The fact that so many people will want these drugs, and so many doctors will be eager to prescribe them, is both an argument for making them available *and* a reason not to do so.

From an economic standpoint, I believe the budgetary concerns are overstated.

First: Some of the costs of these medications will be recouped in overall lower health-care spending. Estimates suggest that a one-point increase in BMI for individuals with obesity is associated with about a $250 increase in annual health-care expenditures. Treatment for obesity with GLP-1s reduces BMI by an estimated three points; that

change in obesity would reduce the cost of coverage for these individuals by an estimated 11.5 percent. A broader calculation, published in the *Journal of the American Medical Association*, estimated that at current prices, 27 percent of the costs of these medications would be offset by other savings.

Second: The calculations assume that Medicaid would pay something similar to the current cost to private insurers. This is unrealistic. First, Medicaid generally pays far less for drugs than private insurance does; for a high-price drug, the Congressional Budget Office estimates that Medicaid pays 53 percent less after rebates. Second, opportunities for negotiation abound. There are multiple similar drugs in this class, and more are yet arriving. It may be possible for Medicaid to get a better deal. […]

• *Emily Oster is the CEO of ParentData and an economist at Brown University. Her books include* Expecting Better *and* Cribsheet.

DOCUMENT 5

A second helping of weight-loss drugs is coming

Natasha Loder, *The Economist*, 10 November 2025

The appetite for weight-loss drugs, known as GLP-1 agonists, has been insatiable since they hit the market a decade ago. In 2024 global spending on them reached $54bn, a figure that is sure to rise in the coming years. These drugs, better known under their brand names of Wegovy, Ozempic, Mounjaro and Zepbound, do not merely promise trimmer waistlines but also seem to reduce the risks of a variety of maladies of the heart, liver and kidneys. As pharmaceutical firms elbow each other for a slice of the pie, the buffet of options will grow in 2026.

One big change to watch for will be the arrival of the first GLP-1 drugs that can be taken orally. Novo Nordisk, the Danish company behind Wegovy and Ozempic, is preparing to launch a pill version of semaglutide, those drugs' active ingredient, with an average weight loss, after a year, of 16.6%. A rival pill, orforglipron, from Eli Lilly, the American maker of Mounjaro and Zepbound, delivered a 12.4% reduction. Though pills are less effective than jabs, which can reduce weight by 16-23% after one year, they are far more convenient. But Ahmed Ahmed of Imperial College London notes that the pills may fall short of these results outside controlled clinical settings. With a daily pill rather than a weekly jab, patients may be more likely to forget doses, or choose to skip an occasional pill to avoid unwelcome side-effects.

Meanwhile, improved versions of injectable drugs are also on the way. In 2026, attention will turn to Lilly's new candidate, retatrutide, a "triple agonist" injectable which activates three receptors involved in weight control and has been dubbed the "Godzilla" of weight-loss medicines. In phase-two trials, participants lost 24% of their body weight over 48 weeks; these results will need to be replicated in the larger phase-three trials, which are due to report at the end of 2025. Nipping at its heels is CagriSema from Novo Nordisk. This drug, a combination of Wegovy and an analogue of a molecule called amylin, which has a satiating effect, demonstrated a 23% loss in phase-three trials.

In the meantime, others are working on longer-acting GLP-1 jabs that can be administered monthly, rather than weekly. Amgen, another American firm, has developed a monthly injectable called MariTide that seems to offer a 20% weight loss after a year, though this will need to be confirmed in phase-three trials. And efforts are under way to make new treatments that temper the loss of muscle associated with using GLP-1 drugs. Eli Lilly is working on an antibody drug known as bimagrumab, which binds to receptors in the body that increase skeletal muscle mass. Tests so far indicate that, when it is combined with semaglutide, it can deliver a 22% reduction in weight after 72 weeks, 93% of which comes from fat (versus 72% with semaglutide alone). Trials of this drug will continue in 2026.

The surge in new products will enrich pharmaceutical firms. But competition could also drive down the costs of treatment, as first-generation drugs, or those that offer slightly poorer top-line results, command lower prices. Some government-funded health systems are likely to make population-scale deals in the coming years, which could broaden access. And as the patent for semaglutide expires in many markets (but not America and Europe) in 2026, generic manufacturers will be able to make cheap copies and expand availability in countries such as Brazil, China and India).

If generic semaglutide were made available to everyone with obesity and diabetes globally, it could save 2.1m-3.1m lives a year, according to one model. Moreover, GLP-1 medications are known to reduce cardiovascular

events, improve sleep apnoea, protect the kidneys and liver, and even show promise for reducing addictive behaviours. Early data have even hinted at reduced risks of cancer and Alzheimer's. More results on these unexpected side-benefits of GLP-1 use will be published in the coming months. However you slice it, 2026 is shaping up to be a pivotal year for these remarkable drugs.

DOCUMENT 6

India's doctors sound alarm over boom in availability of weight loss jabs

Hannah Ellis-Petersen, *The Guardian*, 20 December 2025 (abridged)

India's leading doctors have warned of the dangers of an unregulated boom in weight loss injections, and emphasised they are not a magic pill to solve the country's growing epidemic of diabetes and obesity.

Demand for appetite-suppressing drugs such as Mounjaro, Wegovy and Ozempic has surged since they were introduced into the Indian market this year.

In the eight months since it was approved for sale, Mounjaro – a jab that regulates blood sugar and suppresses appetite to help with diabetes and obesity – is now India's highest-selling drug, overtaking antibiotics.

Its commercial success has led its producer, the drug company Eli Lilly, to begin trials on a similar drug that works on suppressing appetite, and could be released in India in pill form by next year.

An Eli Lilly spokesperson said: "Rising urbanisation, sedentary lifestyles, and changing diets have made weight management a growing public health priority. This convergence of high unmet need, growing awareness and improving access to innovative therapies makes India a significant market for weight loss drugs."

The drug company Novo Nordisk is also pushing for a share of the market. It launched Ozempic this month at the competitively low price of 8,800 rupees (£73) for four jabs a month, compared with the 14,000 rupees (£115) monthly cost of Mounjaro – prices beyond the reach of the average Indian household.

But by March next year, the drug company patents on many of these semaglutide drugs is due to expire in India. This will open the market to domestic companies who are developing their own cheaper versions, which are expected to flood the market and make prices more affordable. Experts predict the market for weight loss drugs in India will hit $150bn (£112bn) a year by the end of the decade.

Many medical professionals and patients have hailed the wide access to these jabs as a long-overdue necessity for India, which is in the grips of a surge in obesity and diabetes that threatens to overwhelm the country's already underfunded and overburdened healthcare system.

According to experts, diabetes and obesity are likely to become the biggest killers in India by 2030. A recent global analysis found that India had roughly 212 million adults with diabetes, accounting for more than a quarter of the global total.

A study by the Lancet found India had about 180 million adults who were overweight or obese in 2021 – and by 2050, this could increase to 450 million, equating to almost a third of India's predicted adult population.

Mohit Bhandari, one of India's leading bariatric surgeons, said he believed that the official numbers of people with diabetes and obesity in India were a "significant undercount due to poor data collection" and estimated they were more than 10% higher than government records.

However, Bhandari is among those urging caution at the widespread and unregulated use of weight loss drugs, which he said were already being abused and mis-prescribed with possible long-term consequences.

"The GLP-1 drugs already very important for India, they're more than welcome," he said. "However, there are very significant problems and caveats to this. These jabs should be properly controlled by the government."

Bhandari warned of the risks of allowing the drugs to be prescribed by pharmacists and GPs, many of whom are connected to certain chemist shops and benefit financially from putting patients on these jabs. The jabs are also increasingly available in gyms and beauty clinics.

"There needs to be rigorous screening and check-ups of patients being put on these drugs," Bhandari said. "They cause a lot of muscle loss, they can cause pancreatitis, gallstones, even blindness in some patients with certain conditions, so this regulation is crucial."

He called on the government to limit who can prescribe the drugs to a board of specialist doctors who would put patients on a long-term programme. "No other country will have people taking these drugs on the same scale as in India," he said. "It means the scale of complications could get very high if there's no strict discipline in how they

are given out to patients. The drugs are good but only in safe hands." […]

Anoop Misra, one of India's most prominent endocrinologists working at Fortis hospital in Delhi, echoed the warnings. Misra said that poor dietary habits, sedentary lifestyles and environmental pollution were likely to be the key drivers of the surge in diabetes and obesity in India, which is evident in the affluent urban elite and poorer rural communities.

Misra said he was seeing an unparalleled demand for the drugs and was now prescribing them to three to seven patients a day, after thorough counselling. He predicted that once the non-patented versions are approved for sale next year, India will become one of the world's biggest and cheapest markets for GLP-1 drugs.

Nonetheless, he emphasised that treating the "nationwide epidemic" of obesity and diabetes required widespread lifestyle changes and education, and weight loss jabs were only part of the solution. […]

DOCUMENT 7 · · PBS, "Does taxing sugary drinks result in better health outcomes? What some cities have found", May 24, 2025.

↳ link: https://youtu.be/HQ3ga37EVY8 (10 minutes, with a focus from 0:00 to 4:22)

PART 2 – GENE EDITING

DOCUMENT 8 · TED-Ed, "How CRISPR lets you edit DNA", January 24, 2019.

↳ link: https://youtu.be/6tw_JVz_IEc (5 minutes)

DOCUMENT 9

For the first time, a CRISPR drug treats a child's unique mutation

The Economist, 15 May 2025

Within days after KJ was born in Philadelphia in August 2024 it was clear that something was wrong. He was not eating and slept too much. Blood tests revealed sky-high levels of ammonia, a toxic substance the body usually expels. Genome sequencing confirmed that he had a rare genetic disease called carbamoyl-phosphate synthetase 1 (CPS1) deficiency, which often kills in infancy, and for which no good neonatal treatment exists. Then one of his doctors suggested something radical: a gene-editing drug designed specifically for him.

At face value, the idea was preposterous. Drug development takes years, time KJ did not have. But his doctor, Rebecca Ahrens-Nicklas, a metabolic-disease expert at the Children's Hospital of Philadelphia and her colleague Kiran Musunuru, a geneticist from the University of Pennsylvania, believed they could produce a drug in months. Remarkably, their plan seems to have worked. KJ is now preparing to leave the hospital for the first time and go home to his family, after becoming the first person to be treated with a bespoke gene-editing therapy. This breakthrough could allow such treatments to one day become a routine option for children with debilitating genetic diseases.

Gene editing works by tweaking the molecular building blocks of DNA, known as bases, to restore the normal function of a mutated gene. KJ's disease was caused by just such a mutation in a gene responsible for producing an enzyme called CPS1. Normally CPS1 helps turn ammonia, which is produced when the gut digests protein, into another chemical that is excreted with urine. Without a working enzyme, ammonia build-up eventually poisons the brain, which can lead to coma and death.

Dr Ahrens-Nicklas and her colleagues opted to make the necessary correction with a new version of the gene-editing tool CRISPR known as base editing.

Whereas conventional CRISPR edits genes by excising or inserting bases, base editing chemically converts one base into another. In all other respects it works like any CRISPR drug: an enzyme known as the editor is guided to the right place in the genome by an RNA molecule designed to match the mutated stretch of DNA. Drs Ahrens-Nicklas and Musunuru had spent years pairing editors with RNA molecules to fix metabolism-related mutations in more common diseases. They felt hopeful they could do the same for KJ on a much shorter timescale. Working in human cells modified to carry his unique mutation, it took them less than two months.

The next step was to get approval from America's Food and Drug Administration (FDA) to give KJ the therapy. This required the researchers to demonstrate that the editor worked and was safe. They did this by inserting KJ's mutation into mice and using the editor to edit DNA in their liver cells, where ammonia conversion happens. Around 42% of the mice's liver cells were edited, enough to suggest a therapeutic effect might be possible in KJ. Following a small number of safety tests in monkeys, the FDA gave its permission.

As part of the treatment protocol, KJ was given his first intravenous dose in February, a second dose 22 days later and a final third dose in April. To ensure the editors reached his liver cells, the doctors wrapped them in tiny bubbles of fat called lipid nanoparticles—the same vehicle that delivered the covid-19 mRNA vaccines—which carried them naturally to the liver.

KJ's ammonia levels improved significantly after that and his doctors were able to decrease the amount of medication he needed to take in order to keep them in check. The most important test, says Dr Ahrens-Nicklas, came when he contracted a virus. In kids with CPS1 deficiency, infection tends to send their ammonia levels flying. KJ's stayed normal.

"They've done a great job if they've managed to put that together for an individual patient that needs treatment in the first few months of life," says Waseem Qasim, a cell- and gene-therapy specialist at University College London and a paediatrician at Great Ormond Street Hospital, who was not involved with the work. Whereas most new gene-editing therapies work by turning off mangled genes, rather than correcting mutations, says Dr Qasim, "This is cleverer."

Drs Ahrens-Nicklas and Musunuru hope that KJ's case will be the first of many, a vision shared by their collaborator Fyodor Urnov of the Innovative Genomics Institute at the University of California, Berkeley. He connected the team with Danaher, a life-sciences company, which produced the editor. Now, Dr Urnov says, "We can never look back." The years-long approach to drug development works for diseases that do not kill or disable very quickly. But in cases where a child born with a unique mutation needs treatment within months, he believes this new approach has to become the standard. He hopes diagnosis, production, testing and approval could one day be done in less than a month.

Much more monitoring is needed to know if KJ's improvement is permanent and whether he will continue to need the medication he was previously on. For now, though, there is cause for optimism. His disease could have been a death sentence. Instead it has resulted in a preliminary protocol for a new way to get drugs to the most vulnerable patients. With a bit of luck, KJ will not be the only beneficiary.

DOCUMENT 10 · NPR, "The quest to create gene-edited babies gets a reboot", August 6, 2025.

↳ link: https://www.npr.org/sections/shots-health-news/2025/08/06/nx-s1-5493448/gene-editing-human-embryos-designer-babies (5 minutes)

DOCUMENT 11 · CNN, "The future of organ transplants", May 14, 2025.

↳ link: https://youtu.be/IAbVA-gNb7U (4 minutes: from 2:05 to 6:09)

Your Next Pet Could Be a Glowing Rabbit

Emily Mullin, *Wired*, February 19, 2025

Humans have been selectively breeding cats and dogs for thousands of years to make more desirable pets. A new startup called the Los Angeles Project aims to speed up that process with genetic engineering to make glow-in-the-dark rabbits, hypoallergenic cats and dogs, and possibly, one day, actual unicorns.

The Los Angeles Project is the brainchild of biohacker Josie Zayner, who in 2017 publicly injected herself with the gene-editing tool Crispr during a conference in San Francisco and livestreamed it. "I want to help humans genetically modify themselves," she said at the time. She's also given herself a fecal transplant and a DIY Covid vaccine and is the founder and CEO of The Odin, a company that sells home genetic-engineering kits.

Now, Zayner wants to create the next generation of pets. "I think, as a human species, it's kind of our moral prerogative to level up animals," she says.

Cofounded with biotech entrepreneur Cathy Tie, a former Thiel Fellow, the Los Angeles Project is all about making animals that are "more complex and interesting and beautiful and unique" than ones that currently exist, Zayner says. The Austin-based company's name is a nod to another controversial effort—the Manhattan Project, which developed the first atomic bomb during WWII.

For the past year, the Los Angeles Project has been operating in stealth mode while its five-person team has been experimenting on embryos from frogs, fish, hamsters, and rabbits. They've used Crispr to delete genes and insert new ones—the latter being more technically difficult to achieve. They're also testing out a lesser-known technique known as restriction enzyme mediated integration, or REMI, for integrating new DNA into embryos. Making these modifications at the embryo level changes the genetic makeup of the resulting animal.

The team has used Crispr to add a gene to rabbit embryos so they produce green fluorescent protein, or GFP. Zayner says they're aiming to transfer the engineered embryos to female rabbits this week. If all goes well, the company will have glowing baby bunnies in a month. (Rabbits have a gestation period of just 31 to 33 days.)

They won't be the first glowing animals ever created. GFP is commonly used by scientists to visually track and monitor gene activity or cellular processes within an organism, often to study diseases. Researchers have previously made fluorescent rodents, monkeys, dogs, cats, and rabbits, but none of these animals were created for commercial purposes. But the Los Angeles Project is designing glowing bunnies and other animals to sell to consumers. "I think the pet space is huge and totally undervalued," Zayner says.

Fish genetically engineered to have the GFP protein are sold in pet stores across the country. Called GloFish, they were made with an older technique called recombinant DNA technology. The company that developed the fish, Yorktown Technologies, sold the brand for $50 million in 2017.

The Los Angeles Project is starting with the GFP edit because it's relatively simple. It's also observable in embryos when they're exposed to blue or ultraviolet light, showing that the gene editing worked. After fluorescent bunnies, the company has its sights on making cats that lack the Fel d1 protein, the primary allergen that cats produce, but also jackalopes, dragons, and unicorns. But more complex editing will be needed to achieve those more ambitious creations.

"As we continue, our goal is to really look at multiple genes at the same time, really understand the multiple genes that contribute towards a very complex trait, and then be able to transfer those changes from one species to another," Tie says. One company, eGenesis, has made pigs with 69 gene edits to make their organs more compatible for human transplants.

"I'm personally really interested in the unicorn," Tie says. It's a tall order that would require understanding the genetics behind the narwhal's twisted horn, then figuring out how to transfer it into a small animal first before engineering it into a horse. "Big ideas take a long time to achieve, and as a company, you have to evolve to meet the needs of the market but also really understand the long-term vision of the technology that you're building," she says.

The idea of making gene-edited pets is sure to raise eyebrows. In fact, bioethicists warned about such "frivolous" uses of CRISPR a decade ago when the technology was in its infancy. The company's glowing rabbits will be an initial test to see how consumers respond.

"I think most people are going to think it's crazy and will dismiss it as crazy," says Andy Weissman of Union Square Ventures, who has personally invested in the Los Angeles Project. "You're trying to convince people to come into a reality that doesn't yet exist."

He sees the company as part business, part art project. “We’ll find out if they can accomplish both, or just one or the other.”

There’s the question of what happens if something goes wrong. Crispr can cause unintended edits, which could lead to cancer or other health problems in an animal. Plus, no one really knows how many edits can be made to an animal’s genome without causing harm.

“We don’t want to harm animals,” Tie says. Both she and Zayner say they take the treatment of animals seriously. The company has not killed any animals for its experiments and doesn’t plan to. They create the embryos by mixing eggs and sperm sourced from ovaries and testes they get from veterinarians and a local butcher.

And GloFish offer a cautionary tale. In Brazil, the fluorescent fish have escaped fish farms and are multiplying in creeks in the Atlantic Forest, raising concerns about whether they pose a threat to native species. Zayner says the animals they create would be spayed and neutered so they wouldn’t be able to reproduce and pass on the genetic changes to offspring,

The company has been in touch with the US Food and Drug Administration about its plans, but it’s unclear how the agency would regulate them. Back in 2003, the FDA determined that the sale of transgenic GloFish were not subject to regulation, based on evidence that the fish do not pose a risk to public health or the environment.

Zayner’s new venture will no doubt test the bounds of gene-editing regulation, as her self-experimentation and DIY genetic engineering kits have in the past. But the Los Angeles Project may also spark much-needed societal conversations around what humans can—and should—do with genetic engineering.

“The crazy thing is, this technology is so advanced, and nobody’s doing shit with it,” Zayner says. “That’s kind of our motto: Let’s do stuff with it.”

DOCUMENT 13 · *New Scientist*, “The TRUTH about de-extinction”, July 31, 2025.

↳ link: https://youtu.be/ogmA0Z6BUPI (4 minutes)

PART 3 – DRUGS

DOCUMENT 14

‘All eyes are on Glasgow’: UK’s first legal drug consumption room ready to open

Libby Brooks, *The Guardian*, 10 January 2025 (abridged)

The UK’s first legal drug consumption room, the Thistle, will open its doors in the East End of Glasgow on Monday morning after a 10-year battle to realise the pioneering facility.

The Thistle will remain open 365 days a year from 9am to 9pm and allow some of the most vulnerable addicts in the city to take their own drugs in a clean and safe environment under the supervision of health professionals.

Such is the level of cross-UK interest that Glasgow city council is coordinating a network of interested cities to lobby the Westminster government for a legislative change that could allow further pilot schemes.

But this potentially transformative moment in UK drugs policy takes place with Scotland’s drug deaths still the worst per capita in Europe, the equivalent of three Scots dying every day. It emerged last week that more than 1,500 drug-addicted babies had been born in recent years, adding to widespread anger at the Scottish government’s continuing failure to arrest this trend, with underfunding of residential rehabilitation and wraparound care to support people getting into medically assisted treatment.

It is “very important” that the facility is not regarded as a silver bullet for the drug death crisis that continues to grip the city and the country, said Dr Saket Priyadarshi, the associate medical director of Glasgow alcohol and drug recovery services. “It’s another part of a system of care, another piece of the jigsaw responding to a very complex problem.”

But he also hit back at critics who favour abstinence-based recovery over harm reduction, and have questioned the merits of spending on a facility that will cater for a few hundred addicts when funding is so constrained elsewhere.

“I don’t see why we shouldn’t be spending money on a group with some of the highest mortality of any population in Scotland. If I was the clinical lead for an oncology service I wouldn’t be asked those questions. I don’t know why I am as clinical lead for drug services,

when we're all saying that the drug death crisis is a national shame."

"All eyes are on Glasgow," acknowledged Allan Casey, the city council's addictions convener, with "a huge amount of pressure to make sure we get it right".

"We know across the world that safe consumption makes a difference, but we need to demonstrate that it works within the confines of the UK, and indeed, the Misuse of Drugs Act," he added.

With drug laws reserved to Westminster, the previous Conservative government repeatedly dismissed calls from Glasgow city council, backed by the Scottish government, for the legal powers to pilot such a scheme, which was first proposed 10 years ago after a HIV epidemic among street addicts drew attention to the cold, dark and dangerous corners of the East End, not so far from the Thistle, where street users injected their drugs.

The go-ahead was finally given for this three-year pilot after Scotland's most senior law officer confirmed users would not be prosecuted.

An individual wanting to make use of the Thistle does not have to give their full name at the reception desk. A member of staff will have a brief discussion with them about what drugs they are taking and how they plan to use them before taking them through to a bright open-plan room of eight injecting booths with tilted mirrors so that nurses can keep an eye on users without encroaching on their privacy. […]

DOCUMENT 15 America Was Finally Turning a Corner on Opioids. Until Now.

The Editorial Board, *The New York Times*, 28 August 2025 (abridged)

Not so long ago, the scourge of opioids seemed unstoppable. More than 400,000 Americans died from drug overdoses between 2020 and 2023. The toll was more than twice as large as that from either guns or vehicle accidents. But 2023 now appears to have been a turning point. Since then, annual overdose deaths have declined more than 25 percent, thanks partly to a creative public health campaign to expand access to treatments like Narcan and Suboxone. The crisis is finally easing.

President Trump's big domestic policy law threatens that progress. The law's Medicaid cuts, which finance lower taxes for the wealthy, will deprive millions of Americans of health insurance. These changes will harm people with all sorts of medical conditions. Yet addicts are particularly vulnerable because of how many of them are on Medicaid. The program covers nearly half of non-elderly adults with an opioid addiction, according to KFF, a health research group. Without insurance, many will drop out of treatment and relapse. Researchers at Boston University and the University of Pennsylvania estimate that the law will end access to opioid treatment for more than 150,000 Americans.

The recent fall in overdose deaths should be a cause for celebration, and one that the country's leaders should look to build on. Opioids have been an important factor in the shocking stagnation of American life expectancy in recent decades. In the 1980s, life expectancy here was similar to the levels in many other rich countries; today, the United States comes in last. No other wealthy nation experienced a similar spike in overdoses in the 2000s.

Mr. Trump, Vice President JD Vance and other Republican leaders have rightly described opioids as a national tragedy that demands action. Instead of taking steps to continue the recent progress, however, they are undermining it. This is one more way in which they are failing to live up to their promise to govern as champions of the working class that voted for them in large numbers last year.

This is not the first time that America's political leaders have failed to take the opioid crisis seriously. After Purdue Pharma, a company owned by the Sackler family, introduced OxyContin in 1996, the painkiller quickly became the drug at the center of the epidemic. Overdose deaths doubled between 1999 and 2006. Still, Congress did not pass major legislation to address the crisis until 2016. Not until 2017 did a president, Mr. Trump, declare a national emergency. Even these actions produced underwhelming results — what Dr. Leana Wen, a former health commissioner of Baltimore, once described as "tinkering around the edges."

While Washington dithered in the 2010s, local and state health officials began to make progress. They cracked down on easy opioid prescribing and persuaded firefighters, police officers, schools and libraries to carry the overdose antidote Narcan. Some of these efforts had nothing to do with the federal government. But many quietly relied on Medicaid, the federal health insurance program that covers low-income and disabled people. The Affordable Care Act, which President Barack Obama signed in 2010, included a major expansion of the program, and states used Medicaid funds to expand addiction treatments. Vermont, for example, built an elaborate "hub and spoke" system that links people to addiction care. The types of treatment provided by these programs can have large effects,

reducing deaths by 50 percent or more, studies show. […]

Mr. Trump's budget law effectively undoes much of the good that the Affordable Care Act did. It is also likely to damage addiction treatment for people who are not on Medicaid, by weakening clinics and hospitals that treat addiction. As people lose coverage and drop out of treatments, facilities will lose Medicaid revenue from those patients. Many of these facilities rely on the program to stay open: Nearly two-thirds of patients getting outpatient treatment for opioid addiction are on Medicaid, according to KFF. Already, some rural hospitals have warned that the Medicaid cuts will force them to close or reduce services. […]

DOCUMENT 16 A dangerous new class of synthetic opioid is spreading

The Economist, 9 September 2025 (abridged)

On a morning in November 2023 Eamon Keenan, a psychiatrist who runs addiction services at Ireland's state-funded health-care provider, received a worrying phone call. "People in homeless accommodation and hospitals are collapsing," he recalls being told. It was the start of a bleak few weeks. In Dublin and Cork, the country's biggest cities, 77 people would end up overdosing. The initial suspect was dodgy heroin, but laboratory analysis revealed a dangerous new class of drugs—nitazenes. Since then, these have been detected everywhere from Freetown in Sierra Leone to Sydney in Australia.

Nitazenes are opioids, a family of chemicals that includes morphine and heroin as well as the much stronger fentanyl, which causes tens of thousands of deaths in America every year. Although measures of their potency vary, scientists estimate that nitazenes can be hundreds of times stronger than heroin, with some thought to be dozens of times stronger than fentanyl. But whereas heroin and fentanyl have long histories as medical analgesics and have therefore been extensively studied, hardly any research exists on nitazenes. With nitazene use rising around the world, and in particular in Australia and Europe, scientists are scrambling to gather data on how dangerous these new drugs are and who is at risk. The emerging picture is grim.

Like fentanyl, nitazenes are molecules that do not occur in nature and must be fully synthesised from precursor chemicals in laboratories. All derive from a chemical structure called 2-benzyl-benzimidazole, a small set of connected rings made up of atoms of carbon, hydrogen and nitrogen. The first nitazenes were made in the 1950s as potential painkillers by researchers at Chemische Industrie Basel, an erstwhile Swiss company, but problems with these chemicals soon became apparent.

Their therapeutic window—pharmacology-speak for the dosage range that has the desired effect without unacceptable levels of side-effects—was very narrow, raising the risk of accidental overdose. For instance, the Swiss chemists reported that whereas 200 milligrams of morphine per kilogram of bodyweight (mg/kg) was enough to kill half of a test population of mice, the most potent original nitazene required only 1 mg/kg to achieve the same effect. (The number for heroin is somewhere in between.) Nitazenes were consequently never approved for medical or veterinary use and soon faded into oblivion.

In 2019, however, toxicologists conducting routine surveillance of the European drug market turned up one nitazene, isotonitazene, being sold directly to users on a dark corner of the internet. Since then isotonitazene (as well as some of its chemical cousins) have been found in America, Australia, Brazil, Canada and most of Europe as well as in countries across west Africa. Data on deaths are scarce because detection is not yet routine, but Britain's National Crime Agency believes at least 333 deaths in Britain in 2024 were linked to nitazenes. The spread of the drugs shows no sign of stopping: according to the UN, more countries and regions report finding new nitazenes each year than report new versions of fentanyl.

Many scientists studying nitazenes believe the explosion in recent years is a supply-side reaction to increased restrictions on other drugs. In the mid-2010s America boosted its attempts to crack down on new fentanyl analogues and their precursors, and persuaded other countries to do the same; China, which is home to producers and exporters of both fentanyl and nitazenes, banned all analogues of fentanyl in early 2019, causing domestic production to plummet. In 2021 the Taliban seized control of Afghanistan, then the world's top producer of opium (it has since fallen behind Myanmar), and outlawed the drug's production. As opium is needed to make heroin, illicit drug producers in Europe are thought to have turned to nitazenes amid fears of an imminent drop in supply. […]

The potency of nitazenes makes them attractive to smugglers because the same number of customers can be served with smaller amounts—which are easier and cheaper to distribute—for the same price. But it also puts users at higher risk of overdosing, especially if they are taking it unknowingly. The batch found in Ireland in 2023, for example, although sold as "Chinese heroin",

contained nitazene but no heroin, which led some users to inadvertently take too much. Nitazenes have also been found in tablets advertised as oxycodone, another opioid. In 2024 pills sold as MDMA, also known as ecstasy, during a music festival in Sydney caused several hospital admissions. (They were later found to contain nitazenes and no MDMA.)

Even tiny amounts of nitazene present in drugs such as cocaine and ecstasy—easily done if they are produced in the same lab—could endanger people with no built-up tolerance to opioids. Such cases have been reported, says Dr Skulberg, "with young people ordering a pill online to check it out, taking it in their room and being found dead by their parents".

All this has prompted governments around the world to ban individual nitazenes. The ease with which their chemical structure can be manipulated, however, means drug producers simply need to tweak a few lab procedures to create an entirely new product of similar potency not subject to the ban. As a result, the authorities have changed their tactics. In January the British government used a generic definition of nitazenes, as compounds derived from the core structure of 2-benzyl-benzimidazole, to categorise all nitazenes as class a drugs, the most severe criminal classification, in the hope of capturing and banning future variations. China implemented a nitazene ban using a similar generic definition in June.

But even if the bans have the desired effects on nitazenes, they will not prevent new synthetic opioids from springing up and replacing them further down the line. That prospect worries researchers like Dr Vandeputte. "We really don't know what's going to be next."

DOCUMENT 17 · *Vox*, "A fact-checked debate about legal weed", December 14, 2022.

↳ link: https://youtu.be/8TPaCsQVwA8 (12 minutes)

PART 3 – Make America Healthy Again - MAHA

DOCUMENT 18 **Will MAHA Change America?**

Ross Douthat, *The New York Times*, August 9, 2025 (abridged)

The movement that helped make Robert F. Kennedy Jr. the secretary of health and human services converged politically with right-wing populism only in the last few years, but in spirit the holistic, outsider critique of modern medicine had a lot in common with MAGA populism long before the "MAHA" neologism came along.

Like populism, the MAHA movement spoke to widely shared frustrations with a medical establishment that didn't seem to have answers to persistent problems and left people who felt failed by the system feeling unheard and disdained.

But like populism's critique of insider politics, the outsider critique of the medical establishment has always struggled to offer an alternative vision that's rigorous rather than credulous. And like MAGA populism, MAHA now finds itself in a complicated marriage with a Republican Party that still retains its pre-Trump orientation toward business interests, drug companies and Big Food.

R.F.K. Jr. entered office promising to address two great challenges in American public health, the spread of obesity and the resilience of chronic illness, and in an ideal world an outsider's critique would have a lot to offer on both fronts.

The roots of the American weight problem are endlessly debated, with car culture and suburbia offered as non-dietary explanations for why we're fatter than the Europeans. The anti-corporate critique of how we grow and make and sell our food nonetheless has a certain plausibility, and the MAHA impulse to push Americans away from chemicals and processed foods seems like an experiment worth trying.

Meanwhile, chronic illness, and especially the lengthening list of ailments that lack a clear causal explanation, is a zone where the medical establishment has largely failed, and a new approach with new eyes, new studies and new data would be entirely welcome.

But the MAHA approach so far is both self-undermining and politically constrained. It self-undermines by matching the medical dogmas it disdains with dogmas of its own, particularly a zeal for the "natural" that underplays

pharmaceutical solutions and imagines that public health is just a matter of stripping away late-modern toxins and restoring ruddy pre-1960s vigor.

Certainly modernity has its toxic side and nature has a lot of wisdom. But the natural world also has a lot of ways of killing us and torturing us, which human ingenuity enables us to overcome. And the pre-1960s landscape yielded better health for some people and premature death for many, many others.

So you need to strike a balance, where you tout organic produce and whole grains and exercise regimes to fight obesity … but also embrace the revolutionary potential of the new wave of weight-loss drugs. Or where you look for the roots of chronic illnesses in chemicals and pollutants …. but also remain open to the possibility that a lot of chronically sick people are dealing with infections that might be cured with the right mix of prescription drugs. (I always tell people that in my experience fighting a chronic tick-borne illness, some of the weird alternative therapies I tried were very helpful, but the high doses of antibiotics were essential.)

And that balance is completely absent from MAHA when it comes to the question of vaccines. There are plenty of legitimate questions about the effectiveness of mRNA vaccines and the true rate of vaccine injuries and the right schedule for childhood vaccinations. But the holistic critique never manages to just stay with those specific issues, while conceding the general truth that vaccines are mostly good. Instead the impulse is always to make vaccines a grand taproot of modern health problems, whether it's through implausible claims about the scale of mRNA vaccine side effects or the indefatigible-yet-unsuccessful efforts to establish a vaccine-autism connection. And the refusal to be disabused by data suggests a deep instinct that vaccination in general is just too unnatural to be trusted — a very human impulse, clearly, but not one that can guide public health.

R.F.K. Jr. was an exemplar of this instinct as an activist; as health secretary he's somewhat trapped by it. His moves on vaccines have been aggressive and unwise, especially the recent decision to cancel all funding for further mRNA vaccine research. Yet they aren't aggressive enough for his allies and supporters, who already feel aggrieved that he isn't delivering a fuller vaccine-skeptical crusade.

At the same time, he also looks like a prisoner of coalition politics, because the G.O.P. is still the party of Big Agriculture and industry groups, which seem likely to impose hard limits on any big push to make the American food supply healthier.

An analogy to the Trump administration's economic policy is useful here. The most ambitious populists sought a radically different approach to right-wing economics, but what they got was Trump's longstanding tariff fixation stapled onto the traditional G.O.P. array of deficit-financed tax cuts. Confronted with the MAHA challenge, likewise, the old corporate powers will make a few concessions on ingredients and learn to live with anti-vaccine sentiment — but otherwise the status quo may win.

DOCUMENT 19 · *The Wall Street Journal*, "How a Texas Movement Is Reshaping Health Policy Under RFK Jr.", December 23, 2025.

↳ link: https://youtu.be/IdRyLhcMd_w (6 minutes)

DOCUMENT 20 · CBS, "RFK Jr. cancels nearly $500 million in funds for mRNA vaccine development", August 7, 2025.

↳ link: https://youtu.be/xaZWtKvqgxQ (3 minutes)

DOCUMENT 21

US cuts universal childhood vaccine recommendations, including Covid and hepatitis

Kwasi Gyamfi Asiedu, BBC, 5 January 2026

An overhaul of US childhood immunisation guidelines has dropped the number of diseases children should be vaccinated against from 17 to 11.

The new list of recommended vaccines, issued by the Centers for Disease Control and Prevention on Monday, includes polio and measles vaccines, but others, like hepatitis A and B, and Covid vaccines, are recommended based on risk and "shared clinical decision-making" between doctors and parents, the announcement said.

US President Donald Trump praised the new recommendation saying it was "rooted in the gold standard of science".

However, the American Academy of Pediatrics criticised the recommendation, describing it as "dangerous and unnecessary."

The overhaul is the latest sweeping policy change made under the Trump administration spearheaded by health secretary Robert F Kennedy Jr.

"Many Americans, especially the 'MAHA Moms,' have been praying for these COMMON SENSE reforms for many years," Trump said in a statement online referring to the Make America Healthy Again slogan.

Kennedy, who has long been sceptical of vaccines, said the overhaul came "after an exhaustive review" and that it "protects children, respects families, and rebuilds trust in public health."

"We are aligning the U.S. childhood vaccine schedule with international consensus while strengthening transparency and informed consent," he added.

According to the CDC, the recommended vaccines for all children will include vaccines to protect against: measles, mumps, rubella, polio, pertussis, tetanus, diphtheria, Haemophilus influenzae type B (Hib), pneumococcal disease, human papillomavirus (HPV), and varicella (chicken pox).

A second category of vaccines was recommended for children depending on risk factors. That includes vaccines for respiratory syncytial virus (RSV), hepatitis A, hepatitis B, dengue, and meningococcal ACWY and meningococcal B - which protects against meningitis.

The third group of vaccines for Covid-19, influenza, and rotavirus has been left to parents and doctors to decide.

For now, insurance will continue to cover vaccines still recommended at the end of 2025.

The new recommendations were made in response to an executive order signed by Trump in December, the US health department said. That order instructed US health officials to compare the country to "peer developed countries" and make recommendations.

The department says it compared the US to 20 nations included the UK, Canada, Denmark and Australia and found the US was "a global outlier" in the number of diseases covered and number of doses. It cited Denmark's recommendation against 10 diseases as a model for the US. But that comparison was criticised by Dr. Andrew D. Racine, president of the American Academy of Pediatrics.

"The United States is not Denmark, and there is no reason to impose the Danish immunisation schedule on America's families. America is a unique country, and Denmark's population, public health infrastructure, and disease-risk differ greatly from our own."

Denmark's population is around six million while the US has about 340 million people.

"At a time when parents, pediatricians and the public are looking for clear guidance and accurate information, this ill-considered decision will sow further chaos and confusion and erode confidence in immunisations," Dr Racine added. "This is no way to make our country healthier."

Republican Senator Bill Cassiday from Louisiana, who is a doctor, also criticised the new recommendation.

"Changing the pediatric vaccine schedule based on no scientific input on safety risks and little transparency will cause unnecessary fear for patients and doctors, and will make America sicker," he said in a statement.

Monday's announcement came weeks after a CDC panel made a new recommendation about when children should receive the first hepatitis B vaccine. Previously, a first dose was recommended for babies within 24 hours of birth but the revised guidelines last December moved it to two months after birth if the mother was hepatitis B negative.

That recommendation was roundly criticised by paediatricians with the American Academy of Pediatrics describing it as "a dangerous move that will harm children".

DOCUMENT 22

Florida moves to end all school vaccine mandates, first in nation to do so

David Ovalle and Lori Rozsa, *The Washington Post*, 3 September 2025 (abridged)

Florida's surgeon general on Wednesday announced plans to end all state vaccine mandates, including for children to attend schools, which would make it the first state to completely withdraw from a

practice credited with boosting vaccination rates and controlling the spread of infectious diseases.

Speaking at a news conference outside Tampa with Gov. Ron DeSantis (R), Surgeon General Joseph A. Ladapo said that every vaccine mandate "is wrong and drips with disdain and slavery" and called the rollback "the right thing to do." Ladapo's stances on vaccines and other measures intended to protect Floridians have drawn criticism from public health experts and advocates.

"Who am I as a man standing here now to tell you what you should put in your body?" Ladapo said Wednesday.

DeSantis, who at the news conference endorsed Ladapo's measures, acknowledged ending certain vaccine requirements would "require changes from the legislature."

Florida law mandates students must be vaccinated against polio, diphtheria, rubeola, rubella, pertussis, mumps and tetanus, while allowing exemptions for religious and medical reasons. Getting rid of those would require lawmaker approval. The Florida Department of Health could more immediately target four vaccines mandated under its own rules: chicken pox, hepatitis B, Hemophilus influenzae type b (Hib) and the pneumococcal vaccine PCV 15/20.

The Trump administration and Health and Human Services Secretary Robert F. Kennedy Jr., the founder of an anti-vaccine organization, have been pushing to upend U.S. vaccine policy. Florida's move underscores the deepening political fault lines over vaccines, a divide certain to polarize parents, communities, lawmakers and health providers across red and blue states.

California, Oregon and Washington — states led by Democrats — on Wednesday announced they were forming an alliance to coordinate their own immunization guidelines and preserve access to vaccines.

At the news conference, DeSantis also announced a Florida version of "Make America Healthy Again," a reference to Kennedy's slogan and agenda to address the root causes of chronic disease and childhood illness, such as nutrition.

Kennedy is scheduled to testify before a congressional committee on Thursday about upheaval at the Centers for Disease Control and Prevention. Last week, the White House fired CDC director Susan Monarez, spurring the resignation of senior leaders who cited efforts by Kennedy and his allies to restrict access to vaccines despite scientific evidence supporting immunizations.

Before his appointment helming the nation's health agencies, Kennedy publicly questioned vaccine mandates, framing his skepticism as a personal choice involving parents, children and doctors. "If you know a vaccine is going to kill a certain number of children, do you have a right to mandate it for every child?" he said in 2020.

An HHS spokesperson did not respond to requests for comment. Kennedy's former organization, Children's Health Defense, reposted video of Ladapo's announcement on X, adding: "This is how you make America healthy again. Will other states follow Florida's lead?"

All states and the District of Columbia have vaccination requirements to attend public schools, while exemptions vary state by state.

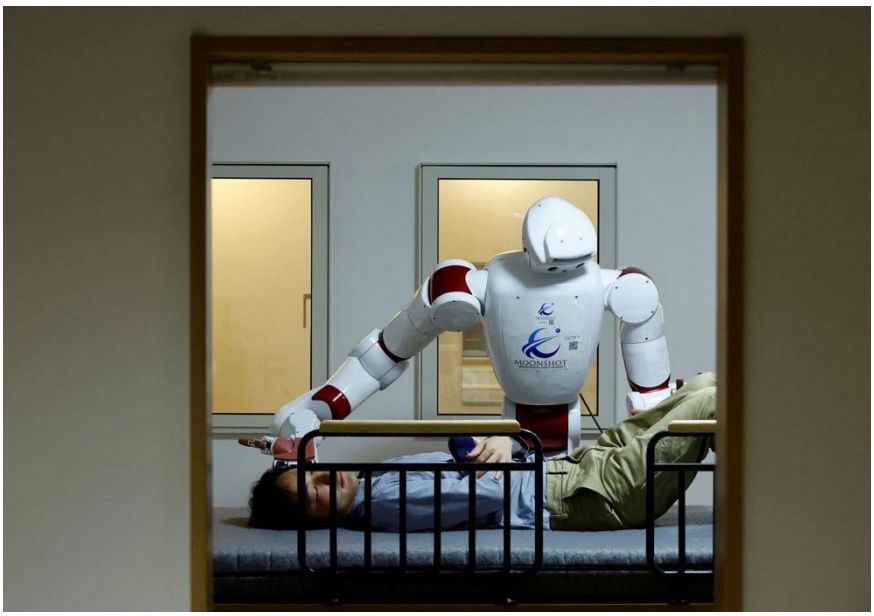
U.S. school vaccination laws date to the 1850s and have always drawn controversy about the right of the government to compel people to inoculate themselves for the public good, said James Colgrove, a Columbia University professor of public health who has studied the history of vaccines. But he said debates in legislatures in recent years have focused on establishing or expanding exemptions, not lifting the mandates themselves, he said.

"It's a very troubling development," Colgrove said. "It's probably going to be catastrophic. Anyone who knows anything about public health can see this is a train wreck."

A KFF survey published in January found 83 percent said public schools should require some vaccines for students, allowing for health and religious exemptions. This includes large majorities of Democrats (93 percent), independents (85 percent) and Republicans (75 percent). […]

DOCUMENT · 23 · NPR, "RFK Jr. unveils new food pyramid", January 8, 2026.

↳ link: https://www.npr.org/2026/01/08/g-s1-105040/up-first-newsletter-ice-shooting-minneapolis-venezuela-tanker-dietary-guidelines (4 minutes: from 8:30 to 12:00)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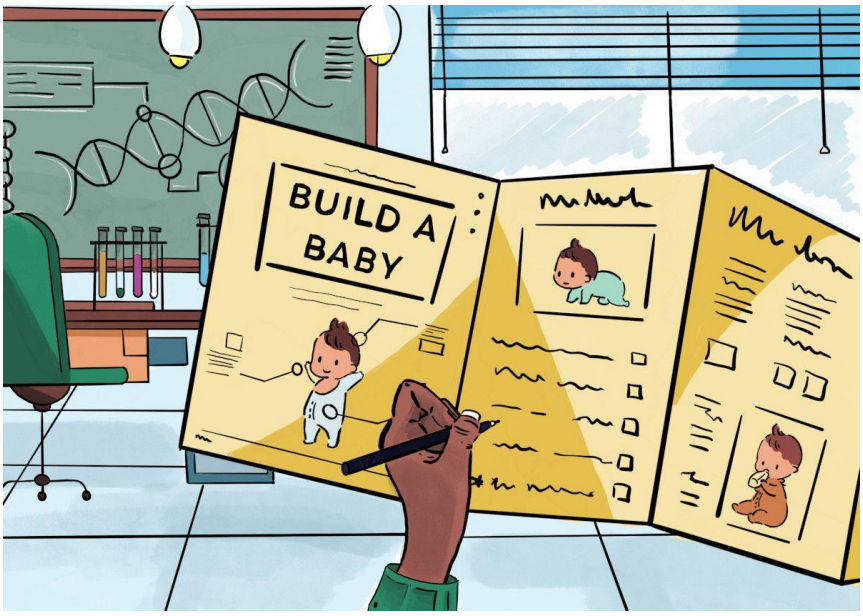
BUILD A BABY

Suggested synthesis outline using Documents 1, 2, 4 and 7

Should weight-loss drugs be promoted as a large-scale solution to tackle obesity?

1. As the state of research stands, these drugs show promising short-term results for overweight patients.
    - GLP-1 jabs have proven far more efficient at helping patients lose weight compared to traditional dieting techniques. (Document 2, l. 34; Document 4, l. 8-11)
    - It even appears that they can help treat other conditions. (Document 4, l. 12-17)
    - However, they do have side-effects which companies need to be transparent about and regulatory bodies consider before approving them. (Document 2, l. 43-53, Document 7, l. 31-44)
    - Britons who are sceptical of weight-loss drugs are worried about the potential unintended consequences they can have on patients' health. Some go so far as calling for stronger regulation. (Document 1)
2. Nevertheless, cautious enthusiasm should overlook the fact that these jabs treat the symptom rather than the root issue.
    - The most frequent reason Britons (Document 1) and MAHA supporters (Document 4, l. 18-20) give for opposing weight-loss jab is that the focus should be on changing your diet and lifestyle. Some similarly argue it is only a short-term solution which does not encourage people to change the bad eating habits they have.
    - These drugs are no magic bullet (Document 7, l. 1-2) since they will not alter the fact that many the food industry is pushing unhealthy diets based on ultraprocessed (or "ultraformulated", Document 2) into people's plates (Document 2, l. 6, 8-10, 16-18).
    - Yet, losing weight is not as easy as simply being willing to make efforts. Treatments based solely on lifestyle changes have proven widely inefficient. Biology is central to the issue, which drugs can help address. (Document 2, l. 10-14; Document 4, l. 20-22)
    - Changes to patients' lifestyles are still needed, however, and must be pursued alongside a drug-based treatment. Not doing could negate the drugs' effect when they are no longer taken. (Document 2, l. 35-41; Document 7, l. 53-54)
3. Besides, the cost of these drugs, whether for individual patients or public health systems, raises concerns about funding access to them.
    - A few sceptics cite the financial burden that having the NHS provide access to these drugs would represent. (Document 1)
    - Many individuals cannot fit the bill to buy these drugs themselves, which entrenches inequality. In the US Trump and Congress's refusal to have Medicare and Medicaid cover them means these patients will be excluded. (Document 2, l. 29-31, 42; Document 4, l. 3-6, 24-40; Document 7, l. 15)
    - The real cost of having public health systems fund access to these drugs is arguably overstated since estimates rarely factor in the rebates states benefit from and the money that will not be spend on having to treat conditions triggered by obesity. (Document 4, l. 41-52)
    - Some pharmaceutical companies are trying to compete by offering cheaper drugs, including soon-to-be-authorised generic drugs. (Document 7, l. 13-14, 16-18)