

Let's Get to the Heart of the Matter With Biolabs and Cows

From [Maureen Medina, Earth/Food/Life a project of the Independent Media Institute](#)

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How can we justify slaughtering cows to repair our hearts, when the consumption of cows is what weakens our hearts.... I put my fate entirely in the doctors' hands—as most people do—and, desperate to alleviate my symptoms rather than add to them, I chose to get a biological valve made from bovine tissue. It took almost a year to be operated on, yet no preventative measures were taken or recommended to alleviate my pain. I begged for surgery because I thought it was the only way. But was it?

The demand for bovine heart valves to treat cardiovascular disease—[the top global killer](#)—is [rising](#), and there is a cruel irony—with which I have firsthand experience—in how the cattle industry has become both the problem and the solution. We rely on medical treatments procured from cows to treat cardiovascular disease in humans, which is largely [caused](#) by our consumption of cows and other animals ([red meat](#)).



Brilliant marketing campaigns by the cattle industry have shielded us from the ugly truth all along: the cattle industry is only interested in making profits at the cost of our health and well-being and the lives of other animals.



The cattle industry profits from government-funded exploitation of cows under the guise of nutrition and medicine. Corporate giants in the food industry, such as Cargill and Tyson Foods, and medical technology giants, such as Edwards Lifesciences, all profit from the cattle they slaughter for their meat, dairy and tissue.

The government subsidies that the cattle industry receives prove to be dangerous for our health while profiting the corporate subsidy recipients. “[C]urrent federal agricultural subsidies focus on financing production of food commodities, a large portion of which are converted into high-fat meat and dairy products’ and other items that increase the risk for cardiometabolic risks in American adults,” [stated](#) the Physicians Committee for Responsible Medicine, while quoting from a study by the Centers for Disease Control and Prevention and Emory University.



Yet “the U.S. government spends \$38 billion each year to subsidize the meat and dairy industries, but only... \$17 million... each year to subsidize fruits and vegetables,” according to a 2015 University of California, Berkeley [paper](#).

It’s a vicious cycle that harms people and animals, and benefits profit-driven corporations. On one side, big agribusiness is slaughtering cows for meat and dairy—foods that researchers have [linked to an](#)

[increased risk of cardiovascular disease](#). On the other side, medical corporations are profiting from producing bovine heart valves.

Cargill, which is one of the largest beef processors in North America and earned [\\$134.4 billion in 2021](#), has been dubbed “[the worst company in the world](#)” by environmental organization Mighty Earth for its unethical and unsustainable business practices and the environmental damage it has caused. In addition to perpetuating [antibiotic resistance](#), Cargill has repeatedly been the source of multiple outbreaks of foodborne illnesses, such as [listeria, salmonella and E. coli](#), over the years, and is responsible for distributing millions of pounds of [contaminated poultry and beef](#).

Tyson Foods is the [world’s second-largest meat processor](#) and [one of four companies that control more than 80 percent of beef processing in the United States](#). In 2020, it earned about [\\$43.2 billion, which is mostly attributed to its sale of beef](#). In 2015, Tyson Foods recalled approximately [16,000 pounds of ground beef products that may have been contaminated with E. coli](#) and had to recall [8,955,296 pounds of chicken products due to potential contamination of listeria](#) in 2021.

Edwards Lifesciences, with reported revenue of [\\$4.4 billion in 2020](#), receives pig hearts and cow tissue daily and has [federal](#) approval to sell cow-based valves in the United States. It typically takes the [pericardium](#) from three cows to create one heart valve. The company has imported more than [100,000 batches of bovine tissue](#) from Australia since 2020. Edwards Lifesciences predicts that “[the global surgical structural heart market opportunity will reach \\$2 billion by 2028](#).”

In 2012, I received a 23 mm bovine valve from Edwards Lifesciences to replace my pulmonary valve. At only 23 years of age, I had my second open-heart surgery. My sternum was cut and spread open, my heart muscle was exposed, my heart was stopped while a machine operated in its place, and my pulmonary valve was replaced with bovine tissue. This was the most extreme experience I have ever endured, yet, according to one [estimate](#), the prevalence of heart valve surgery will increase from 290,000 to 890,000 between 2003 and 2050.



I was given the option of a mechanical heart valve but was told that, if I did, I would require anticoagulants for the rest of my life to prevent blood clotting; the other option was getting a biological valve, which was encouraged. Though the [risks of clotting in biological valves are downplayed](#),

especially in comparison to the risks associated with mechanical valves, my cardiologists from New York-Presbyterian/Cornell Medical Center have urged me—and others who have undergone similar procedures—to take [blood thinners](#) daily for the rest of our lives. With biological valves, which are associated with [easy intraoperative handling and minimal suture line bleeding](#), there is a risk of [degradation](#) after 15-20 years due to calcification or inflammation; the course of action if that happens is to replace the valve once it expires.

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It took almost a year to be operated on, yet no preventative measures were taken or recommended to alleviate my pain. I begged for surgery because I thought it was the only way. But was it? While many conditions (like mine) are congenital, we can still argue about nature versus nurture. Research presented by the European Society of Cardiology found that [eating greater amounts of red and processed meat is associated with an increased risk of heart disease and death](#). According to a [study](#) conducted by the University of Oxford's Nuffield Department of Population Health, which involved more than 1.4 million people whose health was tracked for 30 years, for every 1.76 ounces of unprocessed red meat consumed per day, the risk of coronary heart disease increased by 9 percent. Heart disease [claims](#) approximately 17.9 million lives worldwide annually.

On condition of anonymity, one nurse shared with me, “Healthy people don't make money.” “More than 70 percent of chronic illnesses [including heart failure] can be prevented or reversed with a whole-food, plant-based dietary lifestyle,” according to the [Plantrician Project](#). Yet, “the market for replacement heart valves is growing at a rate of about 13 percent every year globally and demand outstrips supply,” according to [Stuff](#), a New Zealand-based news website.

There are about 10.4 million beef and dairy cattle in New Zealand, and the [United States constitutes the biggest market for the pericardia extracted from these animals](#). One source reportedly refused to divulge to Stuff the number of cow pericardia extracted and sold per year, citing “commercial reasons.” According to [new research](#) on the bovine pericardial market, “the market is expected to reach... \$4,134.4 million by 2027 from... \$1,959.7 million in 2019; it is estimated to grow at a... [compound annual growth rate (CAGR)] of 9.9 percent from 2020 to 2027.”

“[One] hurdle we cannot ignore is that there is no profit in health, while there are immense profits derived from disease; hence, the U.S. has created a ‘disease and disability’ care system, rather than a true ‘health’ care system built on the foundational pillar of prevention,” [pointed out](#) the Plantrician Project.

How can we justify slaughtering cows to repair our hearts, when the consumption of cows is what weakens our hearts? While discerning between farming corporations and medical corporations within the cattle industry, one must ask: Is there a difference?

For the good of human health, as well as the health of the planet and its nonhuman inhabitants (especially cows), it is important for each person to listen to their own body, and that they (in tandem with physicians) stay informed and [explore preventative measures](#).

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Maureen Medina is the founder of [Leave in Peace](#) and a campaign strategist and organizer for [Slaughter Free NYC](#). Her writing and [her work](#) focus on the pursuit of collective liberation, based on the idea that none of us are free unless all of us are free.