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Selling to everyone

High cholesterol

Little known as a health complaint when Henry Gadsden was still managing Merck thirty years ago, the fear of a condition called "high cholesterol" has quickly come to dominate the personal health concerns of tens of millions of people around the globe. For those selling pills, promoting that fear has paid off handsomely: nations everywhere have spent more on cholesterol-lowering drugs in recent years than any other category of prescription medicines.[1] As a group, these drugs now generate revenues of more than $25 billion a year for their manufacturers, a rollcall of the biggest names in the global industry, including Germany's Bayer, the British–Swedish company AstraZeneca, and America's Pfizer.[2] In less wealthy countries, including some states of Eastern Europe, the spiraling costs of this group of drugs on their own can threaten to bankrupt entire health systems.[3]

Contrary to what many might think, cholesterol itself is not a deadly enemy, it is an essential element of the body's makeup, and is vital to life. There is scientific evidence showing that for many people, a raised level of cholesterol in the blood is associated with an increased risk of future heart attacks and strokes.

But with otherwise healthy people there's uncertainty about exactly how much that raised cholesterol will increase your risk of heart disease, and for how many people this might really be a problem.

What *is* widely accepted is that having high cholesterol is only one of many factors that affect your chances of future heart disease. Yet it attracts a huge share of attention because it can be modified with drugs—drugs that now boast promotional budgets rivaling those of some brands of beer or soda. For specialists in prevention like the British researcher Professor Shah Ebrahim, the new cholesterol-lowering drugs—called statins—are a valuable course of action for people who've already had some heart disease. Yet for most healthy people there are much cheaper, safe and effective ways to try to stay healthy than using statins. Improving diet, increasing exercise, and stopping smoking are the obvious and well-known strategies.

Ebrahim is one of many researchers who feel the narrow focus on cholesterol is a potentially dangerous distraction from the real business of prevention. Already, one of the statins, Bayer's Baycol, has been pulled from the market after being implicated in several cases of death.[4] The newest statin, AstraZeneca's Crestor, has also faced calls for its withdrawal, because of very rare but debilitating side effects of muscle wasting and kidney failure.[5]

The dawn of the new age of cholesterol came in 1987, when Merck launched the first of the statins, Mevacor, amid much excitement in the medical marketplace. Mevacor was approved to lower cholesterol levels, which meant the drug could be promoted and prescribed to otherwise healthy people—a potentially enormous market. Several competitors have been approved in the years since and the promotion of both the drugs and

the condition has become frenzied. But one pill in particular has leapt ahead of the pack, and now commands almost half the total market—Lipitor. Racking up sales of more than $10 billion a year, Lipitor is the world's top-selling prescription drug, ever.[6] Its manufacturer Pfizer is the world's biggest pharmaceutical company. With head offices in Manhattan, and a market value around $200 billion, Pfizer is one of the largest corporations on earth, thanks in no small part to widespread fears of high cholesterol.

Sales of these drugs have soared in the last decade because the number of people defined as having "high cholesterol" has grown astronomically. As with many other medical conditions, the definition of what constitutes "high cholesterol" is regularly revised, and like other conditions the definition has been broadened in ways that redefine more and more healthy people as sick. Over time, the boundaries that define medical conditions are slowly widened and the pools of potential patients steadily expanded. Sometimes the increase is sudden and dramatic. When a panel of cholesterol experts in the U.S. rewrote the definitions a few years ago they lowered the levels of cholesterol deemed necessary to qualify for treatment, (among other changes), essentially relabeling millions of healthy people as sick, and virtually overnight tripling the numbers who could be targeted with drug therapy.[7]

According to the official U.S. National Institutes of Health's cholesterol guidelines from the 1990s, thirteen million Americans might have warranted treatment with statins. In 2001 a new panel of experts rewrote those guidelines, and effectively raised that number to 36 million, in a scene reminiscent of Henry Gadsden's dream of selling to everyone.[8] Yet five of the fourteen authors of this new expanded definition, including the chair of

the panel, had financial ties to statin manufacturers.[9] In 2004, yet another new panel of experts updated those guidelines again, recommending that alongside the value of lifestyle changes more than 40 million Americans could benefit by taking the drugs.[10] This time, the conflicts of interest were even worse.

Eight of the nine experts who wrote the latest cholesterol guidelines also serve as paid speakers, consultants, or researchers to the world's major drug companies—Pfizer, Merck, Bristol-Myers Squibb, Novartis, Bayer, Abbott, AstraZeneca, and GlaxoSmithKline.[11] In most cases the individual authors had multiple ties to at least four of these companies. One "expert" had taken money from ten of them. The links were not mentioned in the published version of the cholesterol guidelines, and the extent of the conflicts was not publicly known until media organizations uncovered them, sparking a major controversy.[12] The existence of such ties should not imply that any of these guideline writers would make recommendations in order to please their drug company sponsors. The problem is the growing perception of coziness.

The full details of all those financial ties were subsequently published on a U.S. government website and it is worth taking a look at them for yourself.[13] Strange as they may seem to those outside, such extensive conflicts of interest have become all too familiar to those within the world of medicine. Yet here is a clear case where the doctors writing the very definitions of what constitutes high cholesterol, and recommending when drugs should be used to treat it, are at the same time paid to speak by the companies making those drugs.[14] Cholesterol, though, is no different in this regard than many other common conditions. It is estimated that almost 90 percent of those who write guidelines for their peers have conflicts of interest because of financial ties to the pharmaceutical industry.[15]

The ties between guideline-writers and the industry are just one corner of the vast web of interrelationships between doctors and drug companies. The industry's influence over doctors' practices, medical education, and scientific research is as widespread as it is controversial—not just distorting the way physicians prescribe medicines but actually affecting the way conditions like "high cholesterol" are defined and promoted. As one researcher candidly put it, the closeness between doctors and the pharmaceutical industry has now become a "way of life."[16]

The entanglement starts with the free pizzas for the hard-working hospital residents and interns, and from then on it never stops.[17] As U.S. physicians graduate from the hospital wards out into their own practices, there to greet them daily is an eighty-thousand-strong army of drug company representatives—or detailers—always ready with a smile, some warm doughnuts, and a dose of friendly advice about the newest drugs and the latest diseases. As those who study these interactions tell us, these are the foundations of lifelong relationships between the industry and the profession.[18]

Next comes the continuing medical education, the refresher courses that physicians are strongly encouraged and sometimes formally required to attend. In the U.S. this is now a billion-dollar enterprise, with close to half of that funding flowing directly from the pharmaceutical industry.[19] Doctors are being "educated" about how to use drugs, and how many of us should take them, in venues sponsored by their makers.

After the education comes the scientific research. An estimated 60 percent of biomedical research and development in the U.S. is now funded from private sources, mainly drug companies.[20] In some areas, like the testing of drugs for depression, the figure is closer to 100 percent. Almost all the clinical trials of the new

antidepressants were funded by their manufacturers rather than public or not-for-profit sources.[21] And that research evidence is discussed and disseminated at more than three hundred thousand scientific meetings, events and conferences sponsored by the industry every year, and often hosted by medical societies like the American Heart Association, themselves partially underwritten by drug companies.[22]

At the top of this hierarchy are the so-called thoughtleaders—or key opinion leaders—the senior physicians who write the guidelines, conduct the sponsored research, educate their colleagues at sponsored conferences, and publish papers in medical journals kept afloat with drug company advertisements. Many of the thought-leaders hold positions at prestigious academic institutions, at the same time as being on drug company payrolls as advisers and paid speakers.

One of those thought-leaders in the cholesterol field is Dr. Bryan Brewer, a senior official at the publicly funded National Institutes of Health (NIH) based in Bethesda, just outside Washington, D.C. In the lead-up to the launch of the newest statin, AstraZeneca's Crestor, Dr. Brewer delivered a presentation at an American Heart Association seminar describing the controversial drug in very positive terms, as safe and effective.[23] His talk was considered an important and influential one, and it was later published in a special supplement of the *American Journal of Cardiology*, which is read by prescribing physicians.[24] The timing could not have been better for the drug's manufacturer, as the journal article coincided with Crestor's launch into the massive U.S. market.

The American Heart Association seminar and the special journal supplement were both sponsored by AstraZeneca. So too was Dr. Brewer, though his links were not disclosed in his article

in the journal supplement. At that time he was a paid adviser to the company, and a part of the company's stable of paid speakers. According to later public hearings in the U.S. Congress, Dr. Brewer received in the order of two hundred thousand dollars from outside private interests including drug companies, while simultaneously holding down a position as branch chief at the government's NIH.[25]

The attempts to clean up these entangled relationships between doctors and drug companies have received much publicity in recent years, but they have often been little more than self-serving window-dressing. For example, under a voluntary code created by the industry, it remains acceptable for a drug company to fly three hundred supposedly independent doctors to a golf resort, pay them to attend, "educate" them about the company's latest drug, and then train them to become part of the company's stable of paid speakers.[26]

The golf resort scenario was in fact strongly endorsed by an industry spokesperson as an entirely appropriate way for a drug company to train the large numbers of speakers needed to support its "communications effort."[27] And therein lies the fundamental danger of such coziness: doctors, the people we trust to give us untainted advice about powerful pills, become part of the marketing campaigns for those very same pills, no matter how independently minded they might be—not just helping to sell the medicines, but helping to sell a particular definition of disease that expands markets for those medicines. In this case, high cholesterol has been defined so as to classify more than 40 million Americans as sick and potentially in need of drugs. One of the members of the expert panel who wrote that definition was Dr. Bryan Brewer, who is financially tied to eight other drug companies, on top of his ties to AstraZeneca.[28]

Among some independent health advocacy groups there is a view that the company-tied cholesterol "experts" have gone too far this time, have pushed the boundaries of illness too wide, and caught too many healthy people in the net. The Center for Science in the Public Interest, based in Washington, D.C., has become so concerned it has mounted a public campaign calling for an independent review of the official cholesterol guidelines.[29] More than three dozen physicians, health researchers, and scientists have put their name to a strongly worded letter to the NIH director, arguing that the guidelines, with their expanded recommendations for drug therapy, are not supported by the scientific evidence-arguments flatly rejected by the NIH. [30]

This grassroots campaign was inspired in part by a blistering critique from Harvard University clinical instructor and author Dr. John Abramson. He argues that the guideline panel painted an overly positive picture of the scientific evidence about the risks and benefits of the cholesterol-lowering drugs, and that it has ultimately misled doctors and the public.[31] "This is a perversion of science," he says. "I think they've gone way too far."[32] Abramson is a strong supporter of using these drugs for people at high risk of heart disease, particularly those who have, for example, already suffered a heart attack. Yet he is also one of the voices within the scientific world arguing that prescribing statins to healthy men and women at relatively low risk of future heart disease may offer them no meaningful benefit and even bring real dangers.[33]

While the campaign for an independent review of the cholesterol guidelines was getting under way, another very different and much better funded campaign was being launched elsewhere in the U.S. A new patient advocacy group called the Boomer Coalition sprang onto the world stage with an advertisement

broadcast during the televised Academy Awards ceremony in 2004. The ad kicked off a campaign to make heart disease "the most-talked-about disease" among American baby boomers.[34] It featured the famous Henry Winkler, better known to maturing generations around the world as sitcom wise guy The Fonz, who, along with Wonder Woman Lynda Carter and the estates of former heartthrobs James Coburn and Errol Flynn, has become part of this curious new celebrity coalition.[35]

Along with suggestions about stopping smoking and doing more exercise, the group urges people as a priority to see their doctors and get their cholesterol levels tested on a regular basis. Its website suggests you should "know your numbers" at all times and carry them around routinely "like a driver's license."[36] The group's home page is adorned with slick images from the 1960s civil rights campaigns and peace protests, playing on themes of emancipation activism and rebellion.

While the Boomer Coalition might look to some like a hip new movement, it is little more than the latest attempt at *astroturfing*: the creation of fake grassroots campaigns by public relations professionals in the pay of large corporations. According to the *Wall Street Journal* the concept for the coalition was dreamt up by a Dutch PR company and funded by Pfizer—the makers of the cholesterol-lowering drug Lipitor—with an initial investment estimated at less than $10 million.[37] While the messages about getting tested might on the surface seem a valuable public service, the group's materials reflect none of the uncertainty or controversy that exists in relation to the definition of this condition and who should be treated for it. In contrast to the astroturfing of the star-studded coalition, genuine grassroots groups like the Manhattan-based Center for Medical Consumers encourage a more healthy skepticism towards the promotion of

high cholesterol as a fearful condition. That group—which is not on the industry's payroll—stresses that cholesterol is only one of many risk factors, and that drug benefits are often greatly exaggerated.[38]

The pharmaceutical industry's financial entanglement with the medical profession is fast being replicated in the consumer field—through the creation of groups like the Pfizer-funded Boomer Coalition. A global survey from Britain estimated that two-thirds of all patient advocacy groups and health charities now rely on funding from drug companies or device manufacturers. The most prolific sponsor, according to the survey results, is Johnson & Johnson and number two is Pfizer.[39] While creating the appearance of corporate generosity, such sponsorship can bring many benefits to the sponsor as well as the recipient. Chief among them is that patient groups are a great way to help shape public opinion about the conditions your products are designed to treat. With high cholesterol, there are clearly differing views within the wider health community about how to define the condition, and for whom drugs might be appropriate. Sponsoring advocacy groups that tend to keep messages simple, and keep the focus on the fear of high cholesterol, will inevitably help to maximize the sales of cholesterol-lowering drugs.[40]

Up at White River Junction, set amongst the green mountains of Vermont in the north east of the U.S., the fear-mongering around cholesterol is starting to unsettle practicing physicians like Dr. Lisa Schwartz. "Patients worry a lot about cholesterol," she says, "and a lot of them come in wanting their cholesterol checked."[41] Schwartz tries to reassure her patients that cholesterol is not so much a condition as one risk factor among many that can raise your chances of heart disease or stroke in the future. Her husband, Dr. Steve Woloshin, encounters similar worries from

many of his patients and agrees cholesterol is not a medical condition but a risk factor. "I try to put it in the context of other risk factors people are facing," he says. "If you are a smoker, for example, probably the most important thing to do is stop smoking."

Schwartz and Woloshin, based at the Veterans Affairs Medical Center in White River Junction, support the use of cholesterol-lowering drugs for people who have already suffered some heart disease, and others at high risk of future disease, but they worry that for otherwise healthy people at low risk, long-term use of the statins may offer little benefit and unknown harms. Obsessing unnecessarily about cholesterol levels may also bring unhelpful anxiety for many.

Trained on the busy wards of New York City hospitals, the medical duo moved to Vermont to take up academic postings at the prestigious Dartmouth Medical School, where they are both now associate professors, along with their VA work. Unlike most of those who wrote the latest definitions of cholesterol, these two have no financial ties to the pharmaceutical industry. As physicians working in a federal government hospital, they never see drug company detailers, and they refuse offers of industry-sponsored speaking work. Both publish regularly in the world's top medical journals, and they can have a room full of hardened researchers in stitches with their intelligent and witty performances.

One of their most recent projects involved a critical look at the official cholesterol guidelines. While those guidelines recommend more than 40 million Americans could benefit by taking drugs to lower their cholesterol, Woloshin and Schwartz estimate there are over 10 million currently taking them.[42] Among the more than 30 million who are therefore "untreated" there are many that this pair believe could benefit

from drugs. But there are also many who could lower their risks of heart attack or stroke just as easily without drugs, by other means, such as by stopping smoking. "While we worry about overtreatment, these figures show there is also a lot of undertreatment," says Woloshin. "But we need to do a better job focusing in on the people who really stand to benefit the most from drugs, rather than get distracted by having to treat so many people at low risk," adds Schwartz.

Their examination of the cholesterol guidelines is part of a bigger look at the way definitions of many common conditions are being widened, and how as a result the pool of potential patients likely to be prescribed drugs and other therapies is being expanded. Cholesterol is for them a prime example of what they see as a growing trend. "It's an effort to make everybody sick," says Schwartz. "And the trend is global," adds Woloshin.

One of the key ways of making healthy people believe they are sick is direct-to-consumer advertising of drugs and diseases—and there is now more than $3 billion dollars' worth of it every year in the U.S. alone; more or less $10 million a day. One recent TV advertisement on high rotation in the U.S. featured stunning footage of a middle-aged female surfer riding perfectly formed waves. The mellow mood, though, is broken when the surfer runs in to the beach, and accidentally knocks over a row of surfboards that had been planted neatly in the sand. Somehow, through the magic of marketing, the accident with the surfboards is related to her cholesterol numbers being too high, and that is where the statin that's being advertised can help.

We've "scared everyone into this state," says Schwartz, "and drugs offer an easy way that you can do something about it. There is a sense that the goal is to lower your cholesterol numbers. You hear this idea that "it's all about your numbers,"

but it's not really—it's about whether you have lowered your risk of heart disease. Because cholesterol has become a condition, you can define a treatment's success as having a lower cholesterol level, as if cholesterol is of itself the problem."

The *problem* here is finding effective ways to reduce heart disease, stroke, and premature death, *not* cholesterol levels. For some people, there is no doubt lowering cholesterol with drugs can help; for others, the drugs may be useless, wasteful, and even harmful. According to rigorous and independent analysis of all the clinical trials of the statins, there is no good evidence these drugs offer benefits to healthy women who have not already had some heart disease—women like the healthy-looking surfer in the surfboard ad.[43] For women who have already experienced some form of heart disease, the drugs may offer slight reductions in the risk of future heart problems, lowering the chances over five or so years from 18 percent to 14 percent.[44] But there is no good evidence that the drugs can reduce the chances of a premature death for women.

For men the situation is a little different. For those who already have some heart disease, and others at high risk, the drugs can reduce the chances of further disease and premature death. The large Heart Protection Study published in the British journal *The Lancet* showed that those with heart disease taking a statin for five years reduced their chances of death from roughly 15 percent to 13 percent, and reduced their chances of further heart attacks and strokes from 25 percent to 20 percent.[45]

For most men who have not already suffered any heart disease the benefits are not so clear. There are differing views on the scientific data for this group, with some scientists claiming major benefits, and others like Harvard's Abramson arguing there is no good evidence that the drugs reduce the risk of heart disease or

death in any meaningful way. One recent review of the evidence suggested that for people who have not experienced any heart disease, the drugs provided "small and clinically hardly relevant improvement."[46] So in summary, for many otherwise healthy men and women, there is no definitive proof that these drugs can meaningfully contribute to the prevention of an early death.

Yet the suggestion that taking cholesterol-lowering drugs lowers your chances of an early death has been one of the key messages promoted far and wide, even in countries where direct drug advertisements are still banned and mass marketing takes the form of "disease awareness-raising." The use of the fear of death to market the statins has provoked outrage from independent scientists, consumers, and physicians around the world. The concern is twofold. First, for most of the healthy people being targeted by this mass marketing, there is no good evidence that the statins can reduce the chances of an early death. Second, and more importantly, the promotional focus on cholesterol takes attention away from other effective and efficient ways to make life longer and healthier.

In 2003, several officials from the World Health Organization became so alarmed by some of Pfizer's "awareness-raising" activities that they wrote a statement denouncing the promotion, published as a letter in *The Lancet*.[47] The WHO experts were appalled in particular by an ad that appeared in newspapers and magazines displaying a corpse in a morgue, along with the caption: "A simple test of blood cholesterol could have avoided this." Like a lot of modern pharmaceutical promotion, the ads were not directly promoting a named drug—but rather they were attempting to expand the market for drugs by promoting fear—and offering misleading and distorted information about health and illness along the way. The ad was supposed to increase public

awareness of heart disease—a widespread health problem related to many risk factors including smoking, a sedentary lifestyle, an unbalanced diet, obesity, high blood pressure, diabetes, and high blood cholesterol. The problem with the ad, according to the WHO officials, was that of all the major factors accepted as risks, "only cholesterol is addressed."

> To us, the implication is that smokers, obese individuals, or those who live a sedentary lifestyle can safely continue to smoke, remain overweight, or take little exercise, provided they take medication to reduce their cholesterol values.

The WHO letter went on to argue that the Pfizer-funded campaign was not "accurate, informative, or balanced." Rather, it was misleading and likely to induce "unjustifiable drug use." The letter concluded by stressing the need for health authorities to be more vigorous in regulating pharmaceutical promotion, and in producing more independent and balanced health information to counter it.

The problem here, though, is not just about misleading information, and the need for people to be better informed. Promotional campaigns like this are far more pernicious. As others have observed, saturation-selling campaigns promoting high cholesterol as a major health problem and cholesterol-lowering drugs as a key solution also affect those charged with protecting and improving public health.[48] The cultural obsession with "lowering the numbers" keeps the attention of many official decision-makers narrowly focused on just one small part of the picture, restricting their ability to more creatively and effectively fight heart disease.[49]

The unhealthy obsession with cholesterol has reached the highest levels of decision-makers around the world, as we have seen

with official U.S. government-backed guidelines recommending that almost one in four adults should be taking statins. Those same guidelines recommend that the entire population over twenty years old—around 200 million people—should have their blood cholesterol levels regularly tested.[50] Other nations do not yet have such sweeping recommendations, in part because of questions about the escalating costs and unnecessary harm that can flow from the inappropriate treatment of healthy people.

For London-based Dr. Iona Heath, the whole idea of prevention is being perverted by pharmaceutical promotion. A hardworking inner-city general practitioner, and a long-time official with the Royal College of General Practitioners, Heath brings a tough, ethical approach to medicine, and she has written extensively about the link between poverty and ill health. She and many of her colleagues are becoming increasingly concerned that there is far too much focus in modern health care on the "rich well" and not enough on the "sick poor."[51]

Like Lisa Schwartz and Steve Woloshin across the Atlantic, British doctors such as Iona Heath are now measured on how successful they are at lowering the risks of heart disease for their patients. In the U.S., the government-funded Veterans Affairs system formally rates its doctors like Woloshin and Schwartz on how conscientiously they test and treat the risk factor of high cholesterol, particularly in people who have already had some heart disease. In the UK, the government's National Health Service has similar arrangements.[52] Schemes like this that measure doctors' performance do have some benefits, says Heath, in terms of making sure they take heart disease seriously. But in her view they also act as strong incentives for the doctors to prescribe the quick fix—cholesterol-lowering drugs. The concern in such a system is that with so much focus on lowering

the risks of the well, "the needs of the sick can get marginalized." Looking more globally, Heath argues that a similar distortion of priorities is occurring, as billions are being spent to slightly reduce the risks of future heart disease among the wealthy healthy. "It's so tied in with the greed of the rich countries and the fear of dying—people seem able to deny the reality of death, right up to the last moment. But getting cholesterol down in the West, while not treating those dying of AIDS in African nations, is just obscene."[53]

Heath's concerns about the perversion of prevention are echoed by Bristol University's Professor Shah Ebrahim, who specializes in aging and heart disease. A believer in prescribing statins for those who have already had a heart attack, he sees the benefits for most others as being so small that they do not warrant "making patients out of people like me"—a generally healthy middle-aged man.[54] He says the scientific evidence suggests the health system should spend less time prescribing statins to healthy people, and more time getting strict anti-smoking policies enacted, making sure people have more opportunities for regular exercise, and better access to shops selling fresh fruit and vegetables. And those sorts of broader changes, according to Ebrahim, will produce a lot more health benefits than simply reducing heart disease.

While there is no doubt statins can produce health benefits for many people, their side effects, in some very rare cases, can be deadly. All drugs carry downsides and the cholesterol-lowering medicines are no different. When a drug is being prescribed to a healthy person—as they often are when the drugs are designed to *prevent* illness—those side effects become much more important. Yet despite the fact that this category of drug is one of the biggest-selling classes ever, and people stay on them for years,

their long-term side effects have been very poorly studied. A recent review of all of the clinical trials of the statins found that only a third of those trials fully reported on side effects.[55] "It's just a scandal," says the normally mild-mannered Ebrahim, who is gravely concerned about such a gaping hole in the scientific evidence, "it's quite remarkable." From the evidence that *has* been collected on side effects, there are at least two very important ones—though they are extremely rare: a debilitating muscle-wasting condition call rhabdomyolysis, and liver damage. Yet with so many millions taking the statins worldwide, even rare side effects start to mount up.

Reports of sometimes fatal muscle-wasting linked to Bayer's statin Baycol, when taken in conjunction with a second drug, led to a voluntary withdrawal from the market several years ago, and the company and its insurers have had to put aside more than a billion dollars to fight or settle thousands of the resulting lawsuits.[56] The company's view is that it marketed the statin responsibly, and it is fighting each suit on a case-by-case basis. Without admitting any wrongdoing Bayer has so far settled 3000 cases, and has another 8000 pending.[57]

With the newest statin, Crestor, its manufacturer has had to fight off calls from the consumer watchdog Public Citizen for the drug's withdrawal, and there have been ongoing reports that a very small but increasing number of people taking the pills are experiencing muscle wastage and in some cases even kidney failure.[58] While conceding that rare cases of muscle wasting and kidney failure have been linked to Crestor, AstraZeneca maintains its drug is just as safe as the other statins and accuses Public Citizen of causing "undue concern." In early 2005, however, the company informed regulators that there was a report of a patient's death, possibly linked to the drug. [59]

In the United States, decisions about whether or not a drug like Crestor should be withdrawn are made by the Food and Drug Administration (FDA), the government body charged with assessing the safety and effectiveness of medicines. The FDA is well-known around the world, and its decisions can influence those of many nations. Yet just like the doctors, the patient groups, and the professional associations, the FDA itself now relies on partial funding from the drug companies whose products it is assessing. A new system of user pays, introduced in the 1990s, has meant that more than half of the FDA's drug review work is now funded directly by the pharmaceutical industry—a situation similar to that of many nations, including Australia, Britain, and Canada.[60] The call to pull Crestor from the market has been assessed by people who know that some of their salary—and the salaries of their colleagues—is funded by AstraZeneca and the other drug giants.

The campaign against Crestor has been led by Dr. Sidney Wolfe, the director of Public Citizen's Health Research Group. A six-foot-two piano-playing intellectual who walks to his Washington, D.C. office every morning, Wolfe is one of the most well-informed, aggressive, and influential health advocates in the world. Despite decades in the business, he continues to be outraged by what he sees as the unhealthy conflicts of interest that riddle the global medical establishment, even reaching into the heart of regulatory agencies like the FDA.

It was Wolfe and his colleagues who decided to make an example of the conflicts of interest of a senior official at another public agency, the National Institutes of Health, when he discovered the extent of Dr. Bryan Brewer's dual role as government employee and paid speaker for Crestor's manufacturer AstraZeneca. Wolfe wrote to the NIH director raising questions

about Brewer's links with the company and noted that they were not disclosed in his influential journal article endorsing Crestor.[61] In response, the NIH director expressed regret that Dr. Brewer's financial ties with the drug maker were not disclosed, but indicated that it was acceptable for senior government researchers to work for drug companies in their own time.[62]

Dr. Brewer declined a request to be interviewed about the matter, though in a letter to the NIH director he defended his public presentations about Crestor as "unbiased."[63] And he is certainly not the only senior NIH researcher to have close financial ties to the drug industry. Revelations by investigative journalists and others in recent years have uncovered extensive conflicts of interest, and ultimately sparked congressional inquiries.[64] At one hearing on Washington's Capitol Hill, the site of Congress, committee members expressed dismay at one case where an NIH researcher had received $430,000 from industry sources, and another where stock worth almost $2 million had been held.[65] Initially defending some of the links, in late 2004 the NIH unexpectedly announced a moratorium for all scientific staff on all financial ties with private companies.[66]

Ironically, even if the industry-funded FDA decided to vigorously investigate the safety questions surrounding Crestor, and it convened a committee of its advisers to deliberate, the panel would most likely include physicians with strong financial ties to statin manufacturers—a conflict of interests endemic within many of the regulator's advisory panels, and many of the influential decision-making bodies across the health care landscape.[67] In a bizarre postscript to the controversy over the government's cholesterol guidelines, two of the guideline writers have left their former positions and gone to work for the pharmaceutical industry, one joining the late Henry Gadsden's firm, Merck.[68]

Whatever the future of Crestor and the other statins, or the prospects for more independent drug regulation and more unbiased guidelines, there is a growing skepticism about the selling of high cholesterol and the value of the drugs to treat it. In fact, right from the beginning of the cholesterol boom in the 1980s, critical thinkers like investigative journalist and health researcher Thomas Moore have been exposing the weaknesses in the arguments of those who would seem to welcome statins in the drinking water.[69] Similarly, researchers like Lisa Schwartz and Steve Woloshin, and their colleagues from Dartmouth, have developed international standing for promoting a more informed and skeptical approach to the risks and benefits of all therapies, and for raising concerns that expanding disease definitions put us all in danger of becoming patients unnecessarily.

Perhaps the biggest obstacle to a more rational debate about cholesterol, heart disease, or any other health problem, is the simple fact that too many of the people we turn to for advice on such matters—our doctors—are tied to the makers of drugs. Sometimes those ties involve several hundred thousand dollars a year, sometimes just a few warm doughnuts.