McGwire’s Secret

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In 1935—the year testosterone was first synthesized in the laboratory—the Food and Drug Administration established a unit to monitor the quality of “glandular” products on the market that were supposed to contain bioactive sex hormones. The only “ethical” issue addressed by this group was the possibility of consumer fraud. In fact, by 1941 they had found that more that half of the products they assayed did not meet the requirements of the Food, Drug, and Cosmetic Act. But the idea that hormonal drugs might be “abused” outside of the clinic had hardly occurred to the physicians who prescribed them.

Today the controversy surrounding the testosterone precursor androstenedione reaches far beyond the question of product quality, even if this remains as significant a problem as it was in 1935. For the Associated Press reporter who noticed that fateful bottle of “Andro” pills in Mark McGwire’s locker inadvertently confronted American society with the conflicted (and hypocritical) attitude toward performance-enhancing substances that has become an integral part of our pharmacological way of life.

The shock and confusion provoked by the private drug use of an emerging folk hero provided a dramatic demonstration of how far we are from a working social consensus on the ethics of boosting the various capacities of the human organism, whether they be athletic, sexual, or intellectual. Indeed, in recent months the public has had to absorb a great deal of apparently contradictory and confusing news about performance-enhancing drugs of various kinds. The anti-impotence drug Viagra, released in April, became the fastest selling drug in history, in part because its sensationalistic reception blurred one of the pillars of current drug policy—the crucial distinction between “therapeutic” and “recreational” uses. The drug scandal that crippled the 1998 Tour de France finally destroyed (one hopes) the illusion that the sports officials who run the international federations are interested in effective doping control. Then, alarmed by the spectacle of French gendarmes hauling half-naked Tour riders off to prison cells, the president of the International Olympic Committee, Juan Antonio Samaranch, previously known for his Papal denunciations of the doping “evil,” proposed medically supervised steroid doping. More recently, anyone looking for the hundredth television replay of McGwire’s sixty-second home run ran the risk of exposure to the Ginkoba ad featuring a memory-impaired woman whose drug use enables her to make it through the day. It is hard to imagine what might prompt this ginseng-addicted housewife to shake a disapproving finger at an Andro-loaded Mark McGwire. For who is to say that his self-medication is any less “therapeutic” than hers?

Hovering over every doping “scandal,” though usually unremarked, is the issue of public response. What about those housewives and others for whom sports is simply entertainment? To what extent do such people care about the use of performance-enhancing drugs by athletes? The fact is that it is very difficult to find reliable information on public opinion about doping. Still, after many years of collecting what material I have been able to find, I have concluded that public interest in sporting success outweighs public interest in drug-free sport. While I find this conclusion personally disturbing, it does reflect the historical record, and it is also compatible with the response to Mark McGwire in his role as a kind of Paul Bunyanesque distraction from the meltdown of the Clinton presidency.

The second essential point about public response is that it expresses itself almost entirely through media personnel who care little about doping and do almost no investigative work in this area.
Media professionals make or break drug “scandals,” in part because they are the gatekeepers of information and opinion, but mostly because they are the principal producers of the information and opinion that fill our newspapers and airwaves. Drug scandals occur because journalists and their editors decide to report the actions taken by sports officials or, in the recent case of the Tour, by the police. The McGwire case is atypical in that it resulted from the wandering eye of a reporter who set in motion an instructive and unsettling chain of events that will continue to unfold long after McGwire hit his seventieth, and final, home run of the 1998 season. But let us not forget that this discovery was an accident, and that being a sports “journalist” in the United States rarely has anything to do with investigative reporting or asking some of the deeper questions about how we should handle performance-enhancing drugs.

The media coverage of the McGwire story was only the latest evidence of our society’s basically tolerant attitude toward doping people in various ways. The prevailing opinion among most sportswriters and professional sports people was that the use of “Andro” was (a) a private matter and (b) irrelevant to the integrity of the game. While these are views about which reasonable people can disagree, both sports and media representatives also demonstrated a striking degree of ignorance about the nature of the drug in question as well as disinterest in the social implications of highly publicized drug use by a charismatic athlete. It was clear, in short, that neither group had done much thinking about these issues.

All of the baseball people circled the wagons in defense of McGwire. The Cardinals’ manager, Tony La Russa, angrily charged that the Associated Press should be punished for violating McGwire’s privacy. The Cardinals organization issued a statement that supported McGwire’s use of androstenedione: “It has no proven anabolic effects nor significant side effects. . . . Due to current research that lacks any documentary evidence of any adverse side effects, the Cardinals’ medical staff cannot object to Mark’s choice to use this legal over-the-counter supplement.” Major League Baseball Commissioner Bud Selig commented: “I just can’t comment. I have no knowledge of it. The Cardinals are a disciplined organization, and I don’t think anything goes on there that shouldn’t.”

Five days later Selig and the head of the players’ union, Donald Fehr, issued a joint statement that attempted to dampen interest in the drug issue that might distract attention from McGwire’s home run quest: “In recent days there have been press reports concerning the use of certain nutritional supplements by major league players. The substances in question are available over the counter and are not regulated by the Food and Drug Administration. In view of these facts, it seems inappropriate that such reports should overshadow the accomplishments of players such as Mark McGwire.”

Major League players lined up in a phalanx to defend McGwire’s right to ingest anything he wanted. Joe Girardi, the Yankee catcher, said: “He’s not doing anything illegal. He’s just doing things to help his body. We all do things to help our bodies, take protein. It’s a health-conscious sport.” Chad Curtis, his teammate in the outfield, added: “If a guy wants to improve his game and he feels he can get stronger, and a company comes up with a product that’s legal and they claim that’s going to help him get stronger if he uses it, how can you blame the player for just trying to improve his performance? If the substance is really a
bad substance, don’t blame the player—blame the company that’s putting it out. They’re the ones who should do the research on whether it’s good or bad. They’re claiming it’s a good product, and maybe Mark McGwire or Chad Curtis or whoever else isn’t educated enough to judge whether it’s good or bad.”

The Boston Red Sox slugger Mo Vaughn spoke in the same vein: “Everybody sees that in today’s game, it’s a big man’s game. Strength is the key. But as long as we’re not doing illegal things, and I’m not doing anything illegal and I don’t know guys who are, then it shouldn’t be a problem.” Vaughn pointed out that he himself uses a muscle-building product called PRO-hGH, which is improbably labeled a “food supplement,” and is a paid spokesman for MET-Rx Engineered Nutrition, which markets androstenedione among other products.

The sportswriting establishment generally echoed these views. Jack McCallum’s column in Sports Illustrated pointed to the possible medical and role-modelling problems but emphasized McGwire’s blameless conduct: “McGwire is an adult who, as far as we know, is playing within the rules. If baseball were to ban androstenedione, then he could be faulted if he kept on using it. To hold McGwire to a higher standard than his sport does is unfair.” Tom Keegan of the New York Post wrote: “McGwire is no cheater, and any attempt to paint him as such is just another example of the build-them-up-so-we-can-tear-them-down mentality poisoning today’s society, especially as it relates to today’s sports heroes.” Sure, he said, Major League Baseball should “research the devil out of andro,” and try to determine why the NCAA, the NFL, and the IOC had banned it, but until those findings came in the whole controversy was really a nonissue. Dan Shaughnessy of the Boston Globe wrote of “a tabloid-driven controversy” that was misrepresenting McGwire as a cheater and equated Andro with aspirin.

The most vocal “tabloid” driving the controversy was, in fact, the New York Times. Here one read of “potentially myth-debunking news,” of “artificial flavoring inside the Natural,” of a “tainted” effort even if “the fans don’t seem to mind.” and that McGwire’s drug use had “cast a shadow over his dream season.” An editorial that ran in the main section of the paper saw “cause for great [medical] concern” and called for McGwire and other players to stop taking it immediately. The Association of Professional Team Physicians called for a ban on androstenedione use by athletes and the revocation of its status as an over-the-counter drug on the grounds that it is an anabolic steroid.

Let us look at some of the major issues raised by this episode. First, is it a “food supplement” or “dietary supplement?” As Charles Yesalis of Penn State University put it: “Regardless of what the Cardinals may say, androstenedione is one honest to God sex steroid: this is not vitamin C.” When the (German-language) Journal of Physiological Chemistry reported the synthesis of androstenedione in 1938, the Index Medicus classified it, not surprisingly, as an androgen. The problem is that Federal deregulation of the food supplement industry in 1994 created a wide and expanding niche for substances, hormonal and otherwise, that would have been controlled under the old FDA rules. “Everything I’ve done is natural,” McGwire claimed after the initial publicity, but this statement just sums up the semantic confusion from which the supplements industry benefits. While the problem of formulating a workable distinction between “nutrients” and “stimulants” has bedeviled the doping issue throughout most of the twentieth century, there is no precedent for classifying a hormonal substance as a “nutrient” or as a “supplement.” A 1939 review article, for example, argues that any discussion of nutrients should focus on “special artificial foods intended for consumption immediately before or after athletic performances,” such as carbohydrates or glucose. It would not have occurred to the author of the 1939 article to label as “food” the testosterone products that had just come on the (medical) market, and there is as little reason for us to do so today. Hormone therapies are rather designated as “substitution” or “replacement” procedures that have their own controversial aspects, quite apart from the food/hormone distinction. Dr. Manfred Donike, the late drug-testing expert, said years ago that steroids should not become a “popular nutritional supplement,” and that is the responsible standpoint from a public health perspective. As a testosterone “precursor,” however, androstenedione is a perfect candidate to test societal inhibitions about making sex hormone boosting a routine, over-the-
counter procedure, and that is why the McGwire controversy deserves our careful attention.

The idea that elite athletes like Mark McGwire (or anyone) should have the unfettered right to ingest any drug of choice is very appealing from a libertarian point of view. But this idea becomes impractical as soon as one accepts that competitive athletes enter into the sort of social contract that (like any social contract) must prescribe values and norms of behavior, in this case norms that enforce limits on health risks and/or the enhancement of performance. The alternative to a sports culture of negotiated limits is a “Promethean” subculture that takes the Olympic motto “Faster, Higher, Stronger” literally and without additional refinements. This is the sort of sports subculture that elite weightlifters and shotputters and Tour de France cyclists would have succeeded in establishing long ago but for the often half-hearted and clumsy efforts of sports bureaucrats to frustrate their plans. This is also, of course, the drug ethos that has flourished among (unregulated) bodybuilders for many years.

One deficiency of the Promethean approach is that it disregards the role-modeling effect of the popular athlete who takes drugs, and this is the most serious objection that has been directed against McGwire’s use of androstenedione. Even Patrick Arnold, the American chemist who is reported to have applied an East German recipe to the production of androstenedione in the mid-1990s says that no one under 18 should take the product on account of its unknown long-term effects. The irony is that McGwire, the Herculean idol for kids of all ages, is being asked to renounce a practice he adopted in order to become more Herculean. Which brings us back to Chad Curtis’s exasperated question: how can you blame the player for just trying to improve his performance? The striking thing about Curtis’s monologue is his apparent unfamiliarity with traditional ideas about sportsmanship and self-restraint. Neither he nor McGwire, he suggests, are “educated enough to judge whether it’s good or bad”—a comment suggesting that at least some of America’s most celebrated athletes have little or no sense of what is right and what is wrong when they step onto the field. Curtis seems oblivious to the distinction between what is improper and what is ineffective, since he appears to judge the drug entirely in terms of whether or not it works. It is the responsibility of the company, he says, to make those judgments for us.

It is fair to say that these are judgments the pharmaceutical companies are happy to make when they are given the opportunity to do so. (Doubters need only look at the estrogen replacement industry, or the testosterone ads placed in medical journals during the 1940s.) Indeed, we should assume that the cannier drug company decision-makers out there have been following the McGwire saga with a combination of fascination and trepidation. For by now it should be obvious that the “Andre” episode was an inadvertent market test of a hormonal product that somehow wound up inside the gray zone between testosterone, a controlled substance, and the genuine supplements such as vitamins and minerals. This trial run has confirmed the persisting conflict between two important interest groups, the consumers and the regulators, a conflict that mirrors the bitter feuding over the scope of the FDA’s authority that once pitted former commissioner David Kessler against Sen. Orrin Hatch and other Congressional conservatives bent on deregulating therapeutic drugs. Sales of Andro and other supplements have gone up geometrically in the wake of the massive publicity about McGwire and his little helper, and the question now is whether and how the expanding market for male hormone products can be contained at all.

The other major conclusion we can draw from these events is that, despite the demonstrated power of market demand, which is especially evident on the Internet, the regulators of hormone products can still call upon certain acquired cultural inhibitions in their attempts to check the further growth of this market. Juan Antonio Samaranch’s trial balloon in favor of legalizing steroids was shot down by his associates only moments after launching, amounting to an unprecedented political humiliation for a man who was once a virtual dictator. But what really counts is commercial inhibitions about offending social standards. General Nutrition Centers halted the sale of androstenedione at its 3500 stores in the wake of the recent publicity; and, in a related development, ESPN cancelled Creatine ads during the Little League World Series. For the fact is that drug companies abhor bad publicity, and there is nothing that stigmaizes a drug like its highly publicized abuse by elite athletes who are
tainted as cheats. While pharmaceutical companies promoted testosterone products in the early 1940s with reckless abandon, it was doping scandals in sport that eventually taught them to be cautious about promoting steroids. In 1982 reports of serious side-effects prompted Ciba-Geigy to stop production of methandrostenolone—the anabolic steroid it was marketing under the name of Dianabol—thereby ensuring that the company would not appear to be promoting drug use in sport. Similarly, in 1988 Searle took its steroid Anavar off the market on account of its “misuse in sport.” And in 1997 Schering executives had the unpleasant experience of reading about their steroid Primobolan 25 in a German magazine article about doping in professional cycling. In a similar vein, Pfizer anxiously told the world several months ago that “Viagra is not an aphrodisiac.” Even Patrick Arnold, for whom the McGwire Affair has been nothing less than a godsend, cautiously assures us that his androstenedione cannot take the consumer where he (or she) presumably wants to go: “You will not reach superphysiological limits.”18 Caught between commercial ambition and the lingering notoriety of the anabolic steroid, endocrinological entrepreneurs are still waiting to see which way the wind is going to blow.

This wind may well blow us back toward the libertarian pharmacology that was done in by the Food and Drug Act of 1906. For while the sportsworld’s taboo on the promotion of performance-enhancing drugs is still alive, the fact remains that these prohibitions are selective, inconsistent, and inherently unstable, given the combination of foot-dragging sports officials and extramural pressures from the new hormone market that will reportedly include testosterone-boosting chewing gum. It is worth remembering that the fundamental conflict between medical conservatism and marketing ambition also characterized the sex hormone market of the 1940s. At that time, however, the conservatives prevailed by counseling restraint in conformity with the sexual mores of a pre-Kinsey, pre-Starr Report America in which divorce still carried with it a measure of social disgrace. Yet even then pharmaceutical firms were promoting hormone-based rejuvenation as legitimate medicine and pressuring physicians to make sex hormone products a standard feature of American life. Why that market could not emerge until the 1990s is a story that remains to be told.

Notes
1. Jack Curtis and Ewald Witt, “Sex Hormones: Activities of the Food and Drug Administration in the Field of Sex Hormones,” Journal of Clinical Endocrinology 1 (1941): 363-365. This article deals with female sex hormone products, perhaps because the testosterone products then on the market (methyltestosterone and testosterone propionate) were widely regarded as potent even if their effects were still poorly understood. See John Hoberman and Charles Yesalis, “The History of Synthetic Testosterone,” Scientific American (February 1995): 60-65.
15. The term used by Donike was Volksnahrungsmittel.