

**DIRECT-TO-CONSUMER PHARMACEUTICAL DRUG ADVERTISING:
A CASE STUDY OF CARDIAC DRUGS**

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Abstract

With the advent of the direct-to-consumer advertising strategy, promoting pharmaceutical drugs directly to consumers, rather than to physicians, became mainstream. The use of this strategy has produced widespread effects on a variety of actors and institutions including patients, physicians, and health care providers. This thesis conducts a case study of the persuasive elements, cues, and strategies of direct-to-consumer advertisements for pharmaceuticals treating for cardiac conditions. The analysis examines the print advertising campaigns of five market-leading pharmaceuticals in their category in mainstream media channels. To make these messages persuasive and elicit compliance and awareness from consumers, advertisers have relied on a variety of strategies including scare tactics, humor, emotional appeals, and rationality appeals. From the analysis, it was concluded that the advertisements do not provide enough information to consumers, portray only positive outcomes of the targeted medical condition, seek to empower the consumer, and contribute to the medicalization trend experienced in American society today.

I. Introduction

This research is concerned with prescription drug advertising and the introduction of the direct-to-consumer (DTC) advertising strategy into the marketing mix of pharmaceutical drugs. The changes wrought by this new approach on consumers, health care providers, and physicians have been widespread and have sparked scholarly debate, concern, and interest. This paper will examine this phenomenon and the particular conditions that caused and enabled the shift in health advertising strategies from targeting physicians to addressing patients directly. Most significantly, this research will analyze the elements used in mass media messages produced to sell prescription drugs in today's pharmaceutical market.

Over the last thirty years, as a result of social, economic, and regulatory changes, drug advertising has undergone a fundamental transformation. Today, the consumer—the patient—is addressed directly while the physician—the agent—is bypassed by advertising agencies. Instead of working hard to promote their products to physicians who have the power to prescribe medications to patients who require them, drug companies are circumventing doctors' authority and addressing potential patients directly. In turn, “patients”, who are potentially totally healthy individuals, can actively seek sometimes-unnecessary medications they have seen in an advertisement from their physicians. The result of this change is a profound impact on the drug market, the enforcement of drug control, prescription behavior on the part of physicians and a drastic change in patient-physician relationships. This is a significant social trend that warrants further examination and must be better understood in order to determine its potentially dangerous and problematic long-term effects.

Much literature exists on the topic of drug advertising and the changes it has undergone in the last several decades. Some studies have already been conducted in an effort to describe these

trends. Both quantitative and qualitative analyses of direct-to-consumer messages and the pharmaceutical drug market have been performed by scholars and interested parties and have established that new advertisements and brand introductions have increased dramatically in the last thirty years. Previous studies have also gathered information on the target audiences, common appeals, and marketing techniques prevalent and discernible in health advertisements. This issue has a wide scope of influence and has accordingly been examined by academics from the points of view of physicians, patients, and advertisers in turn to decipher the effects of direct-to-consumer advertising on different individuals and institutions.

This paper aims to review the events and changes that led to the shift in reliance of advertisers from physicians to consumers in marketing pharmaceuticals. Prefaced by the historical overview of regulatory, social, and economic conditions leading up to the change in pharmaceutical advertising tactics, this paper will examine these new techniques through a study of print ad campaigns. This study aims to identify overarching themes and analyze unique elements in the print ad campaigns of several prominent drug brands used to treat cardiovascular conditions. From this analysis, this thesis hopes to address the following questions: How do advertisers make drugs an attractive commodity to patients? What kinds of tactics are used to achieve compliance (i.e. sales)? How do advertising agencies create successful marketing campaigns promoting drugs to consumers who *may not need them*?

This study is significant because the direct-to-consumer marketing strategy has wide-cast implications on a variety of people and institutions: physicians, patients, government, and health care providers. The availability, accessibility, and new legitimacy of prescription drugs may have started as an effort to educate the public and eliminate potential physicians' ethical dilemmas, but has resulted in a changed social order and a climate conducive to potentially risky and unsafe

prescription drug use by patients who may not necessitate pharmacological treatment. It is important to examine how this trend has unfolded to attempt to identify some future possible effects of these changes. This examination, in turn, may provide an important basis for continued studies of the direct-to-consumer strategy and may prove useful in an effort to create policy to regulate advertising and to ensure safe pharmaceutical drug use and the availability of adequate information to the lay public. In addition, while most recent studies have focused on television advertisements for pharmaceuticals, as television has become the medium of choice for the majority of Americans today and advertising in this medium has accordingly increased dramatically in the last decades, this thesis proposes to contribute to the existing body of literature by concentrating on less-studied, though still significant, print advertisements.

II. Literature Review

Direct-to-consumer advertising is defined as “any promotional effort by a pharmaceutical company to present prescription drug information to the general public through the lay media, including newspapers, periodicals, television and radio.” (Cline, 2004, p. 134). In the last 25 years, the volume of prescription drug advertising efforts aimed directly at consumers, rather than physicians, has increased exponentially. Between 1996 and 2003, there was a 400% recorded increase in pharmaceutical companies’ spending on direct-to-consumer advertising (Gellad, 2007, p. 475). Spending on this type of advertising has risen from \$47 million in 1990 to over \$3.2 billion in 2003 (Kaphingst, 2004, p. 517). This steep intensification in concentrated spending has raised concerns among the public, the medical community, the government, and health care providers. Worry about direct-to-consumer advertising’s impact on pharmaceutical prices and expenditures, consumer information, physicians’ prescribing behavior, and the patient-physician relationship has led to increased interest, scholarship, and monitoring of this strategy and the trends it has set in motion (Calfee, 2002).

A. Environmental conditions: how it all started

What factors led to the increase in spending on direct-to-consumer advertising of prescription drugs? This section will identify the turning point in drug marketing tactics when direct-to-consumer advertisements began to proliferate in popular media venues and trace the conditions that enabled this change to occur.

1. Social conditions

The pharmaceutical industry first proposed changing its marketing approach to include directly addressing consumers in 1981. Appealing to the Food and Drug Administration, the federal agency responsible for protecting and promoting public health through the regulation and supervision of goods such as pharmaceutical drugs, pharmaceutical companies justified their proposed changes by citing the public benefit from this type of advertising (Wilkes, 2000, p. 114). The pharmaceutical industry argued that direct-to-consumer advertising could do more than the current model of simply providing the public with access to important drug information: by addressing the public directly, the drug industry and government agencies could protect the consumer more fully. The industry claimed that the educational benefits of advertising directly to the consumer were immense (Wilkes, 2000, p. 115).

Direct-to-consumer advertising, pharmaceutical companies and proponents of the strategy argued, could increase treatment of under-diagnosed conditions, inform consumers about new available treatments, and help consumers make better-informed decisions pertaining to their health and well-being (Kaphingst, 2004, p. 144). These advertisements would also give consumers the information necessary to discuss symptoms and treatment options with their physicians (Becker, 2005, p. 441). By giving patients sufficient information and empowering them to discuss medical conditions they may not have previously thought of with a physician, this strategy was argued to offer significant benefits. Lastly, proponents argued that this form of advertising, by the nature of its persistence and availability in mainstream communication channels, could increase patients' compliance with treatments because of the constant reminders aimed at them on a regular basis.

Some support for the direct-to-consumer advertising strategy was based on previous studies that found that it was possible to influence individuals to exercise personal responsibility

for their health using mass media channels. These communication channels could be used to disseminate information and educate the public about possible dangers and risks (McGuire, 1984, p. 303). These messages were found to motivate individuals to reduce health hazards by adopting a more healthful lifestyle. On the basis of this premise, proponents of direct-to-consumer advertising argued that pharmaceutical companies could achieve similar results by motivating individuals to seek treatment for conditions by mentioning the advertised drugs to their physicians.

Another presumed advantage of direct-to-consumer advertising was that it could significantly reduce (or virtually eliminate) pharmaceutical companies' previous system of marketing drugs to doctors. The practice of offering expensive gifts, including entertainment, recreation, travel, and expensive meals, or illegal kickbacks, such as cash payments or other benefits, to influence physicians had brought the ethics of physician prescription practices under close scrutiny (Consumer Reports, 1996, p. 62). If the promotion offer was effective, physicians would prescribe the promoted brand of drug to patients and in that way directly increase the brand's sales and market share (Becker, 2005, p. 442). This issue was one of substantial discomfort and worry for the American public and government agencies, and the prospect of introducing the consumer into the drug decision equation and mediating the physician's control of the drug market was very appealing to some of those concerned. Providing consumers with information directly, pharmaceutical companies argued, would give the consumer power to seek out appropriate medications and not rely entirely on their physicians to make prescription decisions. In turn, this change would reduce the pharmaceutical companies' need to "court" physicians to disseminate and promote their products (Consumer Reports, 1996, p. 62).

On the other end of the spectrum, these proposed changes in advertising strategy also raised significant concerns. Opponents of the direct-to-consumer advertising proposition argued that this strategy is inappropriate because such messages could confuse individuals who lack specialized medical knowledge (Kaphingst, 2004, p. 515). These same individuals are not in a position to independently diagnose conditions or evaluate the safety, effectiveness or appropriateness of different possible treatments (Becker, 2005, p. 446). The impact on the patient-physician relationship was also perceived to be at risk by this change. Health care professionals worried that direct-to-consumer advertising could undermine this important relationship if patients began to use their new knowledge to pressure physicians to prescribe drugs which they had seen in an advertisement. This, in turn, could lead to inappropriate prescribing behavior on the part of physicians as well as prescription drug misuse and abuse by patients (Findlay, 2001, p. 109). Lastly, some also worried that advertising branded drugs would unnecessarily increase demand and consumption of new, expensive medications over older, cheaper, and safer alternatives (Hollon, 1999, p. 382). As a result of this, health care costs would increase and the financial burden on insurance companies and health care providers would heighten (Kaphingst, 2004, p. 144).

2. Regulatory conditions

The appeals from pharmaceutical companies conveniently coincided with the political and regulatory climate of the time, which was swinging toward giving consumers more choice and legitimacy to take part in the medical decision-making process (Wilkes, 2000, p. 120). According to a longitudinal study conducted by Consumer Reports (1996, p. 62), the overall trend has been one of deregulation, with increasing power and privileges being handed to pharmaceutical companies. Nevertheless, in response to this push for a new type of advertising

targets, the U.S. Food and Drug Administration (FDA) laid out a series of regulations for prescription drug advertisements aimed directly at consumers. This regulation was designed to be particularly stringent. Because FDA staff do not always review ads before they are published, it was necessary to establish a provision that would enforce compliance with regulation standards (Calfee, 2002).

The FDA divides direct-to-consumer advertising into three categories, but regulates only “product-claim advertisements”, which contain specific efficacy and safety information of a particular drug (Gellad, 2007, p. 476). Most basically, these guidelines mandate that prescription drug advertisements be clear and accurate and not false or misleading. The ads are required to present a “fair balance” of the drug’s risks and benefits (Kaphingst, 2004, p. 143). In addition, this risk information must be prominent and readable in the main body copy (Roth, 1996, p. 66). Direct-to-consumer advertisements in print form must specifically include a “brief summary” describing the drug’s uses, side effects, warnings, precautions, contraindications, and effectiveness (Kaphingst, 2004, p. 300).

Regulations for broadcast direct-to-consumer advertisements vary slightly from print advertisements. Primarily, television and radio advertisements must include a “major statement” of the significant risks and most commonly-occurring adverse side effects of the drug in either the audio or visual parts of the presentation (Gellad, 2007, p. 478). In addition, the FDA requires either a “brief summary” that gives detailed information about said adverse effects or “adequate provision” for these side-effects in a different channel (Kaphingst, 2004, p. 515). The FDA further gave power to pharmaceutical companies by clarifying that the “adequate provision” requirement could also be fulfilled by referring consumers to physicians for additional information. Alternatively, consumers could be directed to a brand’s website, toll-free telephone

number, or a concurrent print advertisement for more information (Talley, 1997, p. 2181). Broadcast advertisers were also required to use “consumer-friendly language” in describing major risks in the advertisements (Kaphingst, 2004, p. 515).

FDA approval of advertisements before they are published or disseminated is not required. While ads must only be submitted as they go to air, however, most companies voluntarily submit drafts of advertisements to the agency to reduce the possibility of later official recall by the FDA (Kaphingst, 2004, p. 516). If the FDA does identify an ad that violates regulations, the drug company receives a citation. Nevertheless, only a small percentage of advertisements have been subjected to this measure, and the FDA has yet to enact more severe consequences like obtaining court injunctions to seize products promoted through false or misleading means (Kaphings, 2004, p. 520).

From this review of regulation, it is clear that efforts were made to control and standardize advertisements of prescription drugs to ensure consumer safety and exposure to adequate necessary information prior to beginning a course of pharmaceutical treatment. Nevertheless, it remains unclear whether the advertisements contain and communicate information in a manner that is best suited for consumers.

3. Economic conditions

Although there has not been much evidence gathered in literature on this issue, it is essential to mention the economic incentives and market conditions that gave rise to the direct-to-consumer advertising strategy. Many skeptics argue that although the pharmaceutical industry cites providing educational information to consumers to be the major reason behind switching to direct-to-consumer advertising tactics, the “bottom-line desire for profit is undoubtedly another.” (Hollon, 1999, p. 382). As technology and scientific discovery grow and innovate, it becomes

increasingly difficult to produce a revolutionary, one-of-a-kind drug that will dominate the market. Competing in an expanding market full of brand-name alternatives and struggling to make a profit, the direct-to-consumer approach opens new possibilities before marketers and an untapped source of potential consumers to address and persuade.

In addition to competition from other brand-name drugs, pharmaceutical drug companies' products are rivaled by generics that flood the pharmaceutical market as soon as a brand's patent expires. While patents last for 20 years before they expire, they are rarely granted immediately for pharmaceutical products (Federal Drug Administration, 2010). Instead, the FDA grants exclusivity rights—which like patents grant companies the exclusive rights to a product—for only seven years for an “orphan drug” (Federal Drug Administration, 2010). This exclusivity provision was designed precisely to promote some balance between brand-name drugs and their generic competition. Nevertheless, once this exclusivity expires it is up to the pharmaceutical company to convince consumers that their brand-name product is superior to its cheaper generic counterpart. Faced with the threat of dropping sales, pharmaceutical companies face pressure to maintain or increase the market success of their products. Turning to marketing to achieve these ends, "The winners in the prescription drug category are not...the ones with the best patents or products, but those that are the best marketers." (Freeman, 1998, p. S7).

In addition to economic conditions in a competitive marketplace and the need to expand market share and reap profits, the economic environment also stood to change from this shift in advertising targets. Since consumers must obtain a physician's prescription before purchasing a drug, the necessity of visiting a physician was projected to increase in accordance with the increased exposure of consumers to drug advertisements. This, in turn, could lead to “increased costs in terms of time, inconvenience, and out-of-pocket expenditures for a visit.” (Calfee, 2002).

Nevertheless, proponents countered that out-of-pocket drug expenditures could actually decrease, since health insurance typically covers the cost of prescription drugs (Calfee, 2002).

Prescription drug advertising is unique in that the advertised product cannot be purchased without cooperation from a third party—a doctor, pharmacist, health insurance provider, or a combination of these actors. As a result, to stimulate sales pharmaceutical drug companies must be particularly persuasive and encourage the consumer to seek out more information, talk to a doctor or pharmacist about the drug, and pass on information about the drug to friends and family—activities that disseminate information about and interest in the product and secure a vehicle to complying with the advertisement and purchasing the drug (Becker, 2005, p. 442).

B. Impacts

As seen in the preceding section, in the 1980s and 1990s the stage was set for direct-to-consumer drug advertisements to explode into the marketplace. As partially anticipated, and feared, by critics of this approach, this change caused a variety of repercussions experienced by the different parties involved in health care and the pharmaceutical drug industry.

1. Patients

The single greatest concern regarding direct-to-consumer advertising has centered on the potential impact of this form of advertising on patients. First and foremost, by giving consumers so much influence in making decisions regarding prescription drug choices, the most pressing concern is of patient safety (T’Hoen, 1998, p. 595). Potential dangers arise from the possibility that consumers will not be wholly rational when making decisions or diligent enough to seek out and understand information about a drug from a direct-to-consumer advertisement before

bringing it up with their doctors. The failure to identify or understand some serious health risks associated with a particular drug, for example, could pose a very serious risk to patient health (T'Hoën, 1998, p. 586).

Studies have also found that individuals hold multiple misperceptions regarding FDA regulation of direct-to-consumer drug advertising and how valid and informative these advertisements in fact are. Studies have shown that many people believe drug advertising is “meticulously regulated” (Consumer Reports, 1996, p. 62). Gellad and Lyles (2007) found that 50% of a sampled population believed direct-to-consumer advertisements are submitted to the FDA for approval before they are released. In addition, 43% believed only “completely safe” drugs could be advertised and 21% reported to believe that only “extremely effective” drugs could circulate advertisements for their products (Gellad, 2007, p. 475). Clearly, there is a gap between FDA regulations and consumer comprehension of the policies. This becomes particularly problematic when patients trust the advertisements they see, which could lead to pursuing a prescription for a drug that is not necessarily safe.

An FDA survey found that 81% of respondents in a sample recalled having seen or heard a prescription drug advertisement in the preceding 3 months (Aikin, 2002). Other studies examined the effects of this high level of exposure to prescription drug advertising on consumer attitudes. One study found that media exposure leads to a heightened awareness of prescription drug advertising. This awareness, in turn, was found to be related to favorable attitudes towards prescription drug advertisements (Everett, 2001, p. 44). Interestingly, this study found *print* media advertisements were mostly strongly correlated with awareness and positive attitudes.

Some studies reported other favorable effects of direct-to-consumer advertising. One such study reports that consumers are more likely to initiate discussion with their physician

concerning a particular drug they saw an advertisement for (Kaiser Family Foundation, 2001). This increased communication with a physician, another study argued, could lead to better diagnoses and better-suited treatment plans. The study also reported that individuals are by and large rational and thoughtful consumers, who are prompted by advertisements to seek out more information about advertised medicines and who place importance on features such as side effects, doctor's recommendations, product strength, and previous personal experience when selecting a drug brand (Kaphingst, 2004, p. 520). On the other hand, some more problematic findings stemming from this study include the tendency also placed by consumers on more artificial product attributes, including pill color, brand name and advertising of the product in making drug decisions (Kaphingst, 2004, p. 522). These findings suggest that it cannot be assumed that the general population is educated, informed or rational enough to make mindful and sound decisions when it comes to determining medical treatments. The study even identified specific demographics particularly "vulnerable" to these unsound decisions—the youngest and oldest survey participants. The study warns that these age groups, who value brand name over personal experience, could be particularly susceptible to influence and persuasion by direct-to-consumer advertisements (Kaphingst, 2004, p. 522).

Other studies have reported that a relationship exists between direct-to-consumer advertising exposure and inquiry about the specific drug from a physician or pharmacist (Perri & Dickson, 1988). One study found that attitudes about direct-to-consumer drug advertisements were related to the intention to seek more information about the drug (Williams & Hensel, 1995). Most significant of this series of studies, one conducted by Peyrot et al. (1998) found that direct-to-consumer advertising influenced consumer knowledge and promoted requests of specific drug brands.

Another study conducted by Roth found that some consumers inaccurately interpret advertised messages. The resulting false beliefs indicate that direct-to-consumer advertisements can misinform consumers either directly through inaccuracies spread by an advertisement or indirectly by reinforcing some false previously-held consumer knowledge. These findings are worrisome because they show that consumers do not necessarily make sound decisions when they don't have full knowledge of a drug and its associated risks (Roth, 1996, p. 64).

Another significant cause for concern from direct-to-consumer advertisements is their potential to lead consumers to believe they may have a certain medical problem and, perhaps even worse, that there is an appropriate pharmacological solution to their ailment that must be pursued right away (Woloshin, 1991, p. 1143). The effect of direct-to-consumer advertisements may suggest, then, that this form of advertising promotes the medicalization of common symptoms. Conditions such as sneezing, hair loss, or being overweight—which patients may be able to manage without a physician—now become targets of drug brands and advertisements. The danger associated with this shift is of blurring the boundaries of medicine and the validation of the process of medicalization through the prescription requirement of these advertised pharmaceuticals. Through this process, a consumer quickly turns into a patient who needs to be treated for some condition (Woloshin, 1991, p. 1143).

2. Doctors

In addition to impacts experienced by patients, direct-to-consumer advertising has also had an especially pronounced effect on physicians. Doctors have been coping with changes brought on by this new form of marketing and have been forced to face off with consumers who arrive at their appointments armed with often-questionable, incomplete information from

advertisements. The main impacts of this trend can be divided under two headings—patient-physician interactions and physician prescribing behaviors.

a. Patient-physician interactions

The relationships between patients and their physicians have been significantly affected by the direct-to-consumer advertising trend. With products now marketed directly to the patient and an increasing amount of available information about, and exposure to, drug advertising, one third of consumers who remember seeing an advertisement for a brand-name drug report to have asked their physicians for a specific prescription (Aikin, 2002). Similarly, 92% of physicians in a 2002 FDA survey reported discussing an advertised drug with their patients. These respondents also indicated that the conversation was initiated by the patient (Aikin, 2003). Among those patients who discussed a direct-to-consumer advertisement, 25% received a new diagnosis following their appointment with their doctor (Weissman, 2003). These findings suggest that the direct-to-consumer advertising strategy has proved costly in terms of a physician's time with a patient, which now must be spent reeducating the patient and adjusting his/her expectations from an advertised drug. This type of advertising has also detracted from the discussion of patient symptoms, available treatments, and the context of a patient's illness in favor of pharmaceutical solutions and brand drug information (Wilkes, 2000, p. 113).

In addition to talking with their physicians about prescription drugs seen in an advertisement, patients may go as far as insisting on an inappropriate treatment because they are particularly persuaded by promotional materials they may not fully comprehend or that “come from an industry that has not been historically honest about the medical value and safety of its products.” (Bell, 1999, p. 446). Doctors are becoming increasingly concerned and distrustful of

these advertisements, perhaps because of their own experience with pharmaceutical companies using biased or unbalanced data to promote their products (Wilkes, 2000, p. 117).

This change not only endangers the professional dynamic between doctors and patients, but requests for drugs seen in an advertisement could go as far as to divert the physician's attention away from the patient's other, and perhaps more pressing, medical needs. However, patients appear to be particularly insistent on discussing advertised drugs and obtaining prescriptions to treat their various ills. Bell's study (1999) found that if refused a prescription for an advertised drug, patients would, first of all, be disappointed with the decision. Moreover, the vast majority of respondents believed they would exhibit at least one negative reaction to their physician's denial of prescription (Bell, 1999, p. 450). Respondents reported almost as frequently that they would accept their physician's decision, but a significant percentage of others claimed they would attempt to persuade their physician to reconsider his/her refusal. A few respondents even went as far as to say that they would seek to obtain the prescription from another doctor or else would terminate their relationship with the physician should he/she refuse to provide them with a prescription (Bell, 1999, p. 450).

Not surprisingly, physicians are hard-pressed to contend with these changes. In a study conducted by Gellad et al. (2007), 18% of physicians reported to believe that direct-to-consumer advertising led to problems in interacting with patients, including increased time to correct patient misperceptions, requests for unnecessary drugs, and requests for pharmacological treatments for conditions that could be managed without medication. As a result of patient pressure, doctors report to feel frustration and a sense of loss of control in their profession. Doctors also report to dislike appearing ignorant, poorly informed, or generally unhelpful in refusing to provide a prescription for a requested drug (Wilkes, 2000, p.117).

b. Prescribing behaviors

In addition to the shift in relationship dynamics between physicians and patients, significant changes in physician prescribing practices have been noted as well. Some of those most concerned by the effects of direct-to-consumer advertisements assert that by affecting physician's prescribing practices, this form of marketing cancels out its alleged public health value (Hollon, 1999, p. 382). While it has been argued that physicians serve as gatekeepers for this system of disseminating prescription drugs by ensuring that no drug abuse occurs, data documenting current physician prescribing behaviors has led to the questioning of this assertion (Hollon, 1999, p. 384). In a Consumer Reports (2003) survey, doctors wrote significantly more prescriptions for those who requested them than for those who did not. Clearly, physicians are influenced by patient demands, and are susceptible to pressures exercised by these individuals. As many as half of physicians in an FDA survey reported to have felt at least some pressure to prescribe a particular drug as a result of direct-to-consumer advertising (Gellad, 2007, p. 477).

A study conducted by Schwartz et al. (1997) found that some physicians prescribed drugs "at a rate far greater than that warranted by scientific evidence of their effectiveness." When asked about the reasons behind their prescription decisions, doctors most commonly cited patient demand. Moreover, a study conducted by Petroski et al. (1995) found that physicians are prone to prescribe less effective or efficient medications in order to appear more responsive to the requests of their patients. More recent studies have corroborated previous findings that patients are more likely to obtain a prescription when they arrive at a physician's office expecting one from their doctor (Hollon, 1999, p. 383).

While it cannot be expected that doctors should be immune to marketing efforts, presumably their education and medical knowledge makes them more discerning and skeptical of such persuasion techniques (Hollon, 1999, p. 383). Nevertheless, the frustration and impatience doctors have been feeling as a result of this marketing shift, combined with growing pressure from patients, has led to an increased volume of prescriptions of brand-name drugs, even against some physicians' better judgment (Consumer Reports, 2003, p. 35). As many as 50% of doctors in a Consumer Reports (2003, p. 34) survey reported that it was unlikely or at best only possible they would have prescribed a requested drug if they were basing their decisions solely on their own judgment, barring patient input and pressures.

3. Healthcare organizations, insurance companies

Since direct-to-consumer advertising is still a relatively new strategy, it is difficult to generalize or forecast its precise effects on health care and prescription-filling costs. There is no doubt that direct-to-consumer advertising has caused some changes in the pharmaceutical drug market; the U.S. Government Accountability Office reported that dramatic spending increases have been recorded for advertising pharmaceuticals as a result of increased drug use among the general public (Gellad, 2007, p. 478). This finding indicates that direct-to-consumer advertising is succeeding in stimulating pharmaceutical demand (Hollon, 1999, p. 383). Some drugs that have been carefully marketed have managed to significantly improve their market share, primarily thanks to extensive use of direct-to-consumer marketing techniques (Calfee, 2002). These techniques certainly pay off: in a 2002 GAO report it was estimated that every 10% increase in direct-to-consumer advertising for a drug brand resulted in a 1% increase in sales of that particular product (Gellad, 2007, p. 478).

Serious concerns have also been raised about the increased financial burden brought about by the (arguably excessive) prescription of newer brand pharmaceuticals over generic, cheaper drugs fulfilling the same function as their pricey counterparts (Consumer Reports, 1996, p. 62). Gellad et al. (2007, p. 479) report that prescription drug costs are “one of the fastest-growing segments of health care.” There is significant potential to save billions of dollars simply by substituting back generic drugs for the brand-name equivalents that have replaced them (Gellad, 2007, p. 479).

In addition to the direct costs incurred from filling brand-name drug prescriptions in increasing demand, direct-to-consumer advertising also raises health care costs more indirectly. Increased consumer interest in advertised drugs leads to more office visits and more costly (and possibly unnecessary) tests (Wilkes, 2007, p. 114). While some very expensive, specialized drugs could be cost-effective in the sense that they may be able to prevent long, invasive, and costly procedures such as surgery, most advertised drugs treat only mild, low-risk conditions. As it is, these types of drugs typically do not show a favorable cost-effectiveness ratio (Wilkes, 2007, p. 122).

C. Advertising

As can be seen, the trends started by the shift in pharmaceutical advertising to address the patient directly have the potential, and have already begun, to cause significant, and alarming, changes in American society. Consumers are now at risk of receiving unclear or incomplete information about potent medications; relationships between patients and doctors have become strained and focused more on discussing drugs seen in advertisements rather than patients' more pressing health conditions; physicians have begun to feel frustrated, resentful, and a loss of

efficacy in their own profession while changing their prescribing behavior to accommodate patient requests even despite their own professional judgment; and health care costs are projected to increase dramatically as generic medicines are being replaced by expensive brand-name pharmaceuticals. With these implications in mind, discussion can now proceed on to an examination of the advertising messages that have facilitated the consequences discussed previously. Many studies have been conducted evaluating the content elements of direct-to-consumer pharmaceutical advertisements. Using different approaches, many have ascertained and warned that the educational value of this form of advertising is, as feared, debatable, and that the risk potential, stemming from inadequate information and misleading statements, is high. Overall, scholars seem to agree that direct-to-consumer advertisements are powerful, persuasive messages that are designed to sell a product and are not necessarily safe for the lay public. In addition, these ads appear not to fulfill their educational purpose.

A study by Kaphingst (2001) undertook a content analysis of 23 direct-to-consumer, product-specific television prescription drug advertisements. The study determined that a majority of ads used both medical and lay terms to describe medical conditions. This finding is particularly worrisome considering the different levels of literacy in the average American population. Individuals with more limited literacy skills may have less background information about the drug or condition they see in an advertisement, and may not understand medical terms and jargon used in ads to communicate information. While the FDA urges pharmaceutical companies to use common language and easy-to-understand descriptions in their advertisements, it is evident that companies do not adhere to this requirement, at the potential expense of the consumer who is given incomplete or confusing information (Kaphigst, 2004, p. 518).

Another study by Kaphingst et al. (2004) examined the reading difficulty of the supplemental text materials (magazine ads, web sites, and brochures obtained through toll-free numbers) provided by pharmaceutical companies. The study found that all materials, save one, exceeded the maximum eighth-grade reading level recommended for use in literature aimed at the general public, and concluded that college-level reading ability is necessary to read and adequately comprehend the materials (Kaphingst, 2004, p. 144). Features including the presentation of extensive information not essential for consumers, lack of summaries of main concepts, use of complex syntax and medical jargon, lack of visual aides to summarize main points, and use of small text and a crowded layout were all identified to make actually obtaining additional information about a drug from these supplemental materials exceedingly difficult (Kaphingst, 2004, p. 145). Although the FDA's adequate provision requirement is designed to ensure that consumers have access to product information, this data are presented in an unappealing and incomplete manner in drug advertisements and in an unclear, crowded format in text materials.

A Consumer Reports (2003) content analysis of pharmaceutical advertisements found that while the majority of ads were judged to be factually correct and backed by scientific evidence, many left out important information that was only available in fine print. A study conducted by Woloshin et al. (1999) analyzed the content of 67 advertisements and found that most ads describe the benefits of a medication in vague, qualitative terms that remain largely unsupported throughout the advertisement. Consumer Reports (2003) found that only half of advertisements analyzed conveyed important information about a drug's risks and side effects in the main promotional text of the advertisement. Moreover, less than half were honest about a drug's efficacy. Doctors were consulted during this study and noted omissions, exaggerations,

and other problems in many of the advertisements. One of the major problems with the ads was the brief summary, which was characterized by “medical jargon and tiny print” (Consumer Reports, 2003, p. 36). Even though the information provided may have been accurate, reviewers doubted that consumers would take the time to “wade through it.” (Consumer Reports, 2003, p. 36).

Consumer Reports (1996) conducted a second content analysis of drug advertisements and coded for the ads’ educational benefits and quality by looking at variables such as use of medical jargon, placement of key information, print size, and comprehensiveness of the advertisement. The study identified a variety of misleading messages (one or more) prevalent in direct-to-consumer advertisements. These included omitting, minimizing, or obscuring a drug’s risks; inadequate, incorrect, or inconsistent labeling information; false, misleading, or unsubstantiated efficacy claims; false, unsupported, or misleading comparative or superiority claims; promotion of approved drugs for unapproved purposes or patient populations; promotion of unapproved, still-experimental medications; false or misleading information given to physicians by drug representatives or paid speakers (Consumer Reports, 1996, p. 63).

A study by Kaphingst et al. (2004) found that television advertisements spent more time describing the benefits of a drug than its risks. This finding suggests a violation of the FDA’s “fair balance” requirement. A content analysis conducted by Roth (1996) also found that as many as one third of advertisements failed to present a fair balance of benefit and risk information. In addition, most of the advertisements omitted information on inappropriate uses of the drug and clear directions for proper usage (Roth, 1996, p. 72). Lastly, more complete product information (through a website, toll-free number, etc.) was only available in text, calling into

question drug companies' compliance with FDA regulations requiring that "adequate provision" is made for providing product information.

Kaphingst et al. (2004) also found that some advertisements lacked important contextual information to clarify the risks of an advertised drug. The study cites examples of statements such as "tell your doctor what other medications you are taking"—meant to indicate that the advertised drug is potent and should be taken in combination with other medications only upon approval to avoid adverse side effects—might not make those implications clear to the consumer (Kaphingst, 2004, p. 523). Only a minority of the examined advertisements adequately informed consumers that the drug might not work for every patient and most only described medical conditions and their treatments superficially. Just one of the 23 advertisements studied directed consumers to seek out more information about the drug (Kaphingst, 2004, p. 523). Instead, the majority of ads encouraged consumers to speak with their doctors.

In addition to withholding important information and directing consumers to speak with their physicians, direct-to-consumer advertisements were shown to contribute to the medicalization of modern society by encouraging consumers to seek pharmacological treatment for common ills. A study conducted by Woloshin (2001) found that 39% of the advertisements studied in a content analysis encouraged people to consider a medical cause for common symptoms. A Consumer Reports (2003) survey also found that ads do not mention non-drug therapies for the same condition treated by the advertised drug.

In an analysis of drug advertisement texts, Kaphingst et al. (2004) also found that many ads presented risk information in one continuous segment rather than interspersing information throughout the body of the text. This is problematic when previous studies, such as one conducted by the FDA (1980) showing that ads where risk information was presented in one

segment by a different announcer than the narrator of the advertisement were less persuasive than those that integrated warning information throughout the ad, are taken into account. A study by Wilkes et al. (2001) corroborates this argument, concluding from its own content analysis that direct-to-consumer advertisements tend to play up the positive features of a drug while downplaying its negative or unknown aspects, accomplished by mentioning less favorable effects last, using subheadings to emphasize benefits, and “burying” side effects within the body of the text.

Kaphingst et al. (2004) also found that advertisements used only positive or neutral visual images while presenting important drug risk information. Further, Woloshin (1999) determined that 67% of advertisements coded made emotional appeals to consumers. The most common appeal was the desire to “get back to normal”. Other appeals focused on a feared outcome (Woloshin, 1999, p. 1143). From their content analysis of drug advertisements, Wilkes et al. (2000) found that the most common appeals to consumers included claims of effectiveness, symptom control, innovativeness, and convenience. The study also drew a parallel between advertisers’ tendency to use “new and improved” claims to sell generic products and the 40% of ads that used innovativeness as a compelling selling factor for pharmaceuticals. While marketing techniques must be adjusted to promote a product that involves as many risks and possible adverse side effects as pharmaceutical drugs, they are not eliminated altogether. Accordingly, Wilkes et al. (2000, p. 122) warn that “when it comes to drugs, what is new is not necessarily better and could even be more risky.”

Consumer Reports (1996, p. 62) identified themes of persuasion used in drug advertisements, grouped into categories, including: “optimism reigns”, in which ads imply drugs are 100% effective for everyone; “the good mother”, harping on mothers’ obligation to their

children and implying that mothers who do not use drugs are guilty of neglect; “you don’t say”, ads in which only the fine print contains relevant information about drug potency and efficacy; and “all you need is drugs”, in which the ad neglects to mention that lifestyle or behavioral changes can often solve the problem. This reliance on emotional cues and themes and the dissonance between visual and auditory stimuli could both detract from rational decision-making on the part of the consumer as well as undermine the perception of risk for the advertised drug, and casts into doubt the advertisements’ “fair balance” provision (Kaphingst, 2004, p. 144).

Cline et al. (2004) conducted a content analysis of direct-to-consumer advertisements using a slightly different approach. This study tested the assumption that the direct-to-consumer form of advertising uses social cognitive processes to influence consumer behavior. Based on this premise, the study found that direct-to-consumer advertisements use models with whom consumers identify and “whose personal features, activities, depictions, and products are associated with rewards that function as motivations.” (Cline, 2004, p. 152). Models in these advertisements possessed positive personal characteristics such as “healthy”, “active” and “friendly”, which consumers are likely to identify with and emulate. In addition, the study found that 90% of ads depicted some form of identity rewards, with almost 40% of ads actually depicting models as physical beneficiaries of these rewards (Cline, 2004, p. 152). The study identified both explicit and implicit visual cues that were used to convey strategies for the consumer to achieve those rewards. Given such relatable models, Cline et al. warn, consumers are likely to base their health choices on the favorable outcomes they see in an advertisement instead of on objective reasoning.

Cline et al. (2004, p. 136) also found that direct-to-consumer advertising tends to reinforce stereotypes. The study demonstrated that advertisements featuring only women tended

to focus on stereotypical “women’s issues”, namely women’s reproductive capacity and psychiatric disorders. In addition, advertisements featuring African Americans were dominated by HIV/AIDS. The study also found that despite the plethora of serious medical conditions affecting older adults, only 13% of the ad sample depicted elderly subjects (Cline, 2004, p. 138). The study concluded that direct-to-consumer advertising tends to rely on, and enforce, stereotypes relating to gender, race, and age.

Multiple studies have examined the content of direct-to-consumer advertisements using varied approaches. While it is clear that drug information should be independent, reliable, and thorough, drug advertising is “none of these things.” (T’Hoen, 1998, p. 596). Most academics now agree that the educational benefit of the ads is moderate at best and the quality of information presented is poor (Hollon, 1999, p. 382). Researchers largely concede, as summarized succinctly by a Consumer Reports (2003, p. 36) survey, that “advertisements are not public service messages—they’re meant to move goods.”

Research Questions

To add to the existing body of literature examining the direct-to-consumer advertising strategy, this thesis aims to address the following research questions: How do advertisers make pharmaceutical drugs an attractive commodity to patients? What kinds of persuasive tactics and cues are used to achieve compliance (i.e. sales)? How do advertising agencies create successful marketing campaigns promoting drugs to consumers who *may not need them*? Studying and breaking down the persuasive elements in this type of advertising will not only enhance the understanding of communications studies scholars of what elements make drug advertisements persuasive, but can serve as an important basis for future studies and policy suggestions to eliminate the threats posed by pharmaceutical companies appealing directly to poorly-informed, but eager consumers. This study will examine the questions posed above using a subset of ads treating for cardiovascular conditions collected from popular magazines. This thesis serves as an illustrative case study of direct-to-consumer advertising techniques.

III. Methods

Textual analysis was conducted to identify the features and persuasive strategies utilized in direct-to-consumer drug advertising campaigns. Campaigns were selected based on the health condition treated by the advertised drug, that drug's popularity in the pharmaceutical market, and the medium in which the ads were delivered.

A. Campaign selection

The top-treated medical conditions of American patients are, unsurprisingly, also among the most expensive to treat (UPI, 2008). Estimates of the costs of the top 10 medical conditions in the United States stand at over \$500 billion. The most prominent, and expensive, condition among these is heart disease.

EXHIBIT 3
Decomposition Of Change In Nominal Health Care Spending, Fifteen Most Costly Medical Conditions, 1987–2000

Condition	Total change in spending (millions of dollars)	Percent change in spending attributable to		
		Increased cost per treated case	Rise in treated prevalence	Increased population
Heart disease	26,228.5	68.6	1.1	30.3
Pulmonary conditions	24,792.0	37.5	41.9	20.6
Mental disorders	24,503.3	21.1	59.2	19.7
Cancer	17,734.3	41.9	27.4	30.7
Hypertension	15,385.8	59.8	18.9	21.3
Trauma	14,596.6	169.1	-108.5	39.5
Cerebrovascular disease	11,078.9	20.8	60.3	18.9
Arthritis	10,282.8	44.3	31.6	24.1
Diabetes	9,626.8	23.6	49.8	26.6
Back problems	9,486.4	21.7	52.6	25.8
Skin disorders	7,286.5	54.8	22.0	23.2
Pneumonia	7,203.8	93.8	-18.4	24.6
Infectious disease	6,191.6	95.2	-17.5	22.3
Endocrine	5,029.1	28.0	43.4	28.6
Kidney	3,231.4	8.8	55.8	35.4

SOURCE: 1987 National Medical Expenditure Survey (NMES) and 2000 Medical Expenditure Panel Survey, Household Component (MEPS-HC).

NOTE: All changes were statistically significant at the .05 level, except for change in spending, kidney disease (at the .10 level); rise in treated prevalence, heart disease (not significant); and increased cost per treated case, endocrine and kidney disease (not significant). Medical conditions ranked by change in spending between 1987 and 2000.

Therapeutic Class	Value (\$bn)	% of Total	Growth vs. 2005
Cardiovascular	100.8	17%	7%
Central nervous system	99.9	16%	8%
Alimentary tract and metabolic	73.6	12%	9%
Anti-infectives (bacterial, viral, fungal)	61.4	10%	3%
Respiratory	40.1	7%	6%

Pharmaceuticals World Market

Cardiac disease is also the leading cause of deaths worldwide (Thorpe, Florence & Joscki, 2004). Cardiovascular disease refers to conditions affecting the heart's ability to function properly. Since a disruption of blood supply to any part of the body can cause severe tissue damage, cardiovascular conditions are particularly deadly. As such, an entire industry dedicated to treating these conditions has sprung up. In spite of research, technological, surgical and pharmacological innovations, and an increased social consciousness of cardiac disease, however, people continue to lead unhealthy lifestyles that put them at risk of developing heart disease. Since heart disease develops over a long course of time, it is often difficult to prevent entirely and explains the steady reliance on pharmaceuticals once a diagnosis is made and treatment begins. Heart conditions were selected for analysis in this study following the rationale that the more prevalent among the population and expensive to treat, the more likely that drug companies would compete to penetrate into that market and establish a market share.

Specific drugs treating for heart disease were selected on the basis of their market success. Leading the drugs in this category is Pfizer, Inc.'s cholesterol-reducing Lipitor, the world's best-selling drug, which reportedly ran \$244.4 million in advertising costs in 2009 (Associated Press, 2010). Selection of drug brands for study was based on the assumption that

the more successful and market-dominating a drug is, the more likely it is to be advertised and widely available to the public through mainstream communication channels. Both Lipitor and Zocor, another cholesterol-controlling drug, were listed in the top 10 list of prescription drugs that contributed most to the increase in pharmaceutical spending (National Institute for Health Care Management, 2000). Lipitor and Zocor are joined by Pravachol in leading the cardiac treatment drugs, accounting for approximately 85% of the \$6 billion market (Spain, 1999).

With these considerations in mind, advertising campaigns were selected on the basis of the print publication in which they were found. Since heart conditions affect both sexes indiscriminately, advertisements were selected from magazines that do not appeal exclusively to one sex. Magazines were selected on the basis of their popularity, calculated by circulation numbers. The justification for selecting popular publications was the increased probability of encountering advertisements for market-leading brand-name drugs in commonly-consumed, general-audience venues.

Most Popular Magazines in 2010 (by circulation):

1	Better Homes & Gardens
2	Reader's Digest
3	Game Informer
4	National Geographic
5	Good Housekeeping
6	Woman's Day
7	Family Circle
8	Ladies' Home Journal
9	People Magazine
10	Time Magazine
11	Taste of Home
12	Sports Illustrated
13	Cosmopolitan
14	Prevention
15	Southern Living
16	Maxim
17	O, The Oprah Magazine

18	Glamour
19	Parenting
20	Redbook
21	Parents
22	Martha Stewart Living
23	ESPN, The Magazine
24	Newsweek
25	TV Guide

Magazinecost.com

B. Artifact description

Following the screening process described above, campaigns for Lipitor, Zocor, Pravachol, Vytorin, and Plavix were selected from the University of Michigan's microfilm archives of *Reader's Digest*, *People Magazine*, *Time Magazine*, and *Newsweek* from the years 1995-2010, when direct-to-consumer print ads became most prominent in the chosen communication channel. Approximately 50 ads—about 10 distinct advertisements for each of the drugs selected for study—were identified and make up a comprehensive body of evidence for analysis. A brief description of the campaigns follows, and the advertisements themselves can be found in the appendix section. Collectively, despite varying layouts, the advertisements are all text-heavy and feature accessible, relatable models.

1. Lipitor

Lipitor has been the world's leading cholesterol-reducing drug, as well as the highest-selling prescription drug, since 1998 (Associated Press, 2010). Lipitor contains an enzyme blocker, known as a statin, to help lower cholesterol and triglyceride fats in the blood and ultimately prevent strokes and heart attacks (Mayo Clinic, 2010). Between the years 1995 and 2010 Lipitor was marketed through two main print ad campaigns: in the first, the layout of the ad

is dominated by text and an enlarged image of a trusted, credible source—a physician, inventor of the artificial heart, or a heart attack survivor. The copy of the ad gives straightforward, factual information about the product and urges the consumer to consult their physician about the drug (see Appendix A1). The second part of the campaign, running concurrently with the first, is less obviously a drug campaign, featuring relatable models—people of all ages, races, and appearances—with numbers representing personal statistics, their cholesterol numbers, and the impact of Lipitor on these scores (see Appendix A2).

2. Zocor

Zocor is another leading brand of cholesterol-lowering statins. Like Lipitor, it helps lower cholesterol and fats in the blood by reducing the liver's cholesterol production activity (Mayo Clinic, 2010). Zocor also had two major advertising campaigns from 1995-2000. The first campaign features classic family memories—a wedding, a grandparent playing with a grandchild, an aging couple in an embrace—accompanied by copy urging patients to manage their cholesterol numbers to arrive at these life milestones (see Appendix B1). The second campaign, running concurrently, shows individuals in different challenging situations, like cold weather or a difficult hike, and the precautions they take to stay healthy. The copy of the ad then urges the consumer to consider Zocor as a precaution against heart conditions (see Appendix B2).

3. Pravachol

Rounding out the top-3 selling cholesterol-lowering medications is Pravachol, a statin which reduces the amount of cholesterol produced by the liver to decrease the risk of heart

disease and stroke (Mayo Clinic, 2010). Pravachol's print advertising campaign focuses on "average" figures partaking in different activities. Each individual states that he/she eats right and exercises, but that those safety measures are not enough to prevent a heart attack. The rest of the ad is text-heavy and informative, like most other advertisements in this category (see Appendix C).

4. Vytorin

This drug is manufactured by Merck, the same company that produces Zocor. Vytorin combines the main ingredients of Zocor with another drug, Zetia, to reduce the absorption of cholesterol in the intestines (Mayo Clinic, 2010). Vytorin's advertising campaign takes a lighter approach to treating high cholesterol, rejecting the serious tone of other drug ads in favor of a more humorous take on the main contributors to high cholesterol—diet and family history. Each ad in the series features a slightly parodied elderly figure representing an individual's family history as well as a typical high-cholesterol food, like a hamburger, French fries, or a club sandwich. Large text below the images compares Vytorin to other market leaders and emphasizes the dual efficacy of Vytorin against the sources of high cholesterol (see Appendix D).

5. Plavix

Plavix helps prevent future strokes, heart attacks, and artery blockages in patients with a history of cardiovascular problems by preventing blood clots from forming in blood vessels (Mayo Clinic, 2010). Plavix has not had a consistent advertising campaign in the years 1995-2010, and the advertisements show some variation in appeal tactics. Collectively, however, the

ads employ more sinister images and slogans than their competitors. With images such as a hospital “Emergency” sign displayed backwards, suggesting that the consumer is already inside the emergency room; a strong and formidable construction worker who, the ad suggests, is still susceptible to heart disease; or simply the word “Clot” in large, bold face letters, the ads are slightly intimidating and very direct. Most importantly, the word “clot” is featured prominently in every advertisement, sometimes even serving as the main visual element in the ad (see Appendix E).

C. Textual Analysis

Textual analysis was conducted in the effort to examine the persuasive techniques used by pharmaceutical drug companies to advertise products to a newly-empowered, medically uneducated consumer base. The analysis itself was fashioned from several textual analysis protocols, used together to complement each other and compensate for structural differences.

While this analysis is primarily a textual one in nature, overarching guiding questions were based on McGuire’s *content* analysis coding scheme, which considers:

- (1) Source factors, or the medium, genre to which the text belongs, and the context within which it is found, as well as the discourse community the text is a part of and the communicator’s characteristics (such as its credibility or trustworthiness);
- (2) Message factors, or the type of appeal and delivery style of the communication;
- (3) Channel factors, such as verbal versus nonverbal venues;
- (4) Receiver factors, or target audience characteristics—including age, education, and personality variables; and

(5) Destination factors, or the outcomes promoted by the communication, such as immediate versus long-term change (McGuire, 1984, p. 300).

This method was used to compensate for some of the weaknesses of textual analysis, which, used alone, does not take into consideration factors external to the message itself. These factors, as outlined by McGuire's model, are important for a more thorough and holistic understanding of the direct-to-consumer strategy and the kinds of messages that are the result of this movement's influence. This study made significant efforts to control for source, channel, receiver, and destination factors, to be described in the data analysis section. The main emphasis of the analysis, however, rests with the message factors, which will be discussed in detail for every selected campaign individually.

Interpretive textual analysis was used to achieve the objective of taking apart message factors and enhancing the holistic approach of content analysis to analyzing communications. This form of analysis allows a probe of implicit social meanings from a text. The following procedure, based on a combination of Daniel Chandler's book *Semiotics: The Basics* and Roderick Hart's *Modern Rhetorical Criticism*, was followed to conduct the textual analysis of the message factors, as outlined by McGuire's model.

This synthesized procedure analyzes the elements and style of the communication, taking into consideration:

- (1) The signifiers (cues, images, symbols) in the advertisements and their meanings;
- (2) The ad's modality, or position—addresses the advertisement's major claims and the validity and strength of the evidence used to support the claims as well as the clarification

devices and warrants used to strengthen the message—in addition to an assessment of the persuasiveness of the advertisement;

(3) The class of paradigm, or pattern, the text belongs to—the values and contrasts that emerge as a result of the particular choice of medium, genre, and theme for the advertisement;

(4) The syntax, or structure, of the text and a discussion of how sequential and spatial arrangement affects the text's meaning;

(5) The literary elements (metaphors, analogies, etc.) present in the text and how they are used to achieve the text's intended reading;

(6) The semiotic (meaning) codes in both the ad's text and images and the relationship between these two components and the consumer—this analysis probes the cultural values and the preferred reading of the advertisement.

Ad campaigns were analyzed individually and the analysis is detailed in the results section. A holistic, inter-campaign evaluation of recurring themes and elements is presented in the discussion section.

IV. Results

Analysis was conducted in order to identify and take apart the persuasive elements and strategies used in direct-to-consumer advertising efforts to market pharmaceutical drugs treating for cardiovascular conditions directly to consumers, bypassing physicians. While the messages themselves differed significantly in their approaches to persuasion, other elements of the communication process—specifically, the source, channel, receiver, and destination factors, as described by McGuire’s model—were held relatively constant. Though these factors were controlled, however, they nevertheless merit holistic examination and application to the individual campaigns examined in this section.

1. Source factors

The medium of the text was held consistent through the selection of popular magazines, as described in the methods section. All advertisements were selected from a collection of magazines chosen by both title and year published. As a result, the ad campaigns examined here all ran concurrently and in comparable (or identical) media channels. *Time Magazine*, *Reader’s Digest*, *People Magazine*, and *Newsweek* are mainstream, popular magazines appealing to all genders and races alike, an important consideration as heart disease affects individuals indiscriminately. As a result, heart health drugs were not expected to be marketed in specialty magazines appealing only to a very specific demographic. Instead, it was assumed that this selection of magazines would yield the greatest number of advertisements for this class of drugs.

These magazines are also part of a similar discourse community, appealing to a particular, albeit wide, demographic. The magazines are comparable in the way that they combine news and current event stories with human interest pieces, celebrity tracking, and

shopping features, which demands a certain intellectual ability on the part of the publications' consumer populations. As a result, the demographic that reads *Time Magazine*, *Reader's Digest*, *People Magazine*, and *Newsweek* is generally educated, socially engaged, and young to middle aged (Pew Research Center, 2004). Although print advertisements are far-reaching, thanks to the considerable circulation numbers these popular magazines enjoy, they are constricted by space, size, length, and feature limitations imposed by print media. In a world where advancing technology makes it possible to reach consumers directly in their homes using highly interactive, personalized media, pharmaceutical companies have capitalized on television and online advertisements to lure consumers. Nevertheless, print advertisements remain an important source for study and are perhaps even more informative for the purpose of this analysis than their electronic counterparts because of said restrictions, which make them easier to analyze.

Lastly, the selected magazines have the benefit of being long-standing and professional, and therefore are assumed to be credible sources of information for their readers. Advertisers must compete for these lucrative, and often very expensive, advertising spots specifically for that reason—readers who trust the publication they are reading will be more likely to trust the advertisements they see running in its pages (Pew Research Center, 2004). While advertisers use different tactics to emphasize their products' credibility and trustworthiness, the publication in which the ad is running makes an important contribution to readers' perception of the advertisements' credibility.

2. Message factors

The one major element that was not controlled for in the screening process—and the main object of this study—is the message, or advertising campaign, itself. The type of appeal and

delivery style of the messages vary considerably, and shed light on the main research question of this study: how advertisers attempt to persuade potential consumers to seek a prescription for a brand-name pharmaceutical drug? Message factors were analyzed for every selected campaign individually, below. A more comparative analysis follows in the discussion section.

A. Lipitor

1. Campaign 1 (*Appendix A1*)

The first branch of Lipitor's major advertising campaign in the years 1995-2010 is neat, loaded with text, and straightforward. The spatial organization and elements included in the ad make it seem more informative than commercial, and lends a sense of credibility and expertise to the message conveyed by the communication. With the exception of a top bar dominated by a large, Lipitor-promoting quote and a figure—from Dr. Robert Jarvik, an inventor of artificial heart models to individuals who have survived heart attacks or strokes—the ads feature a lot of text arranged in a clear, minimalist design and featuring different text fonts. The advertisements are easy to read and have the appearance of a professional, scientific text.

The choice of models for this series of advertisements lends credibility and humanity to the otherwise stark, somewhat intimidating text. As the endorsers featured in the ads assert that “[Lipitor] lowered my [cholesterol]” and “I never thought [a heart attack] could happen to me”, Lipitor's effort to lower cholesterol and save lives is painted in an altruistic, concerned light. Although the models are clearly vulnerable, as they themselves have suffered from heart conditions or threats like high cholesterol, their weakness makes them all the more relatable and their success stories of “beating” cholesterol, avoiding a second heart attack or stroke, and determination to seek out a medication that will help them accomplish this goal make them

inspirational to consumers concerned with their heart health. The ads' use of models whose careers are relevant to the cardiac conditions treated by the drug—like the inventor of the artificial heart—or whose experiences have inducted them into this particular community strengthens the credibility of the ads in several ways. First, the endorsers' personal experiences of Lipitor use and knowledge of the drug makes them seem competent and trustworthy. Through their worried facial expressions, these spokespeople also seem to convey a deep concern for the heart health of the reader, who may be at risk of heart attack or stroke. The models' and the accompanying text's urging to find out more about Lipitor gives the ads a sense of goodwill and concern, implying that the pharmaceutical company has the best interests of the audience in mind. Lastly, the use of “real”, relatable models that resemble the average reader and whose testimonies are familiar to the targeted audience makes the message delivered by the ad particularly powerful. Overall, the use of relatable models in the campaign enhances the personalization and poignancy of the advertisements. In addition, the use of models with success stories, showing only favorable outcomes of using the drug, portrays the risk of heart attack or stroke as a serious, but manageable condition thanks to the availability of Lipitor.

The ads also assure potential consumers that Lipitor has been extensively researched, claiming that over 400 clinical studies have been completed in its evaluation. While this impressive statistic clearly is meant to imply that the drug is safe for use, the advertisements hedge around specifically calling the drug safe and do not provide additional information about its efficacy or potency. The avoidance of mentioning risks and side effects of the medication in the main body of the ad and its placement on the reverse side of the page—where fewer readers are likely to notice, or bother, to read it—is a classic feature of the direct-to-consumer strategy. Despite broad claims of effectiveness and assertions of safety, these are not backed by evidence

in the ads and although casting an illusion of reassurance, can be deeply misleading to the casual reader.

In addition to the cues and images, which add credibility to the ads' message and make it more relatable to consumers through the use of carefully selected models, the ads take a very clear position on what can—and should—be done to treat high cholesterol. The text and images of the ad strongly act as a call to action for those with high cholesterol “when diet and exercise are not enough”. Although the ads offer little evidence to support the claims made in the body of the text, the emphasis on rationality, information, and reason is evident throughout the ad, from the somber visuals to the minimalist, professional layout of images and text. The ad is persuasive because it manages to draw in the casual reader using emotional cues prompted by the models who claim they “trust their hearts to Lipitor”, and then continues to bombard the consumer with text and information that emphasizes the rational facet of the drug selection process. Hooked by the seemingly-trustworthy models and further drawn in by the abundance of information made available, the ads appear to aim to appeal to individuals who want more than a vague assurance of the drug's efficacy. By providing information about the drug, advertisers make the ad particularly persuasive and Lipitor especially appealing. The use of motivational warrants, “ideas suggesting that some desirable end must be achieved or that some desirable condition is being endangered,” (Ehninger and Brockriede, 1963) in this fashion is particularly effective in luring and persuading an emotionally-based, but rationally-inclined individual.

The advertising campaign fits into a value paradigm that emerges as a result of the choices of elements—texts, visuals, layouts—in the ads. The values of individualism and personal choice—so deeply ingrained in the American doctrine and work ethic—are very evident in the advertisements. Although lay individuals must consult their physicians to obtain a

prescription for a drug like Lipitor, the suggestion that the consumers themselves can seize control of their own destinies and actively work to improve their own health even when “diet and exercise are not enough” and they require supplemental pharmaceutical aid is very empowering. In addition, the respect for and trust in scientific research and rationalism are indulged in the advertisements by presenting information, although somewhat simplistically, to the consumer and giving the impression of respect for his/her intelligence and involvement in the decision-making process in selecting a drug. The combination of consumer empowerment in both the emotional and rational dimensions is particularly powerful in stimulating interest in the advertised product.

Lastly, the campaign also draws on “universal topics” (Wilson and Arnold, 1974) that add meaning to the advertisements and reflect the cultural values they promote. Perhaps most important in this campaign, the potency of Lipitor, combined with its capacity to change a patient’s health and the feasibility that this favorable change will occur, work to strengthen the ads’ message. The modern societal need for a pharmacological solution to all ills and the assurance of the product’s effectiveness and credibility—lent by the publication in which the ad appears, the major pharmaceutical company promoting the product, and the message elements discussed here—is satisfied and consumers are enticed to seek out a prescription for Lipitor from their doctors.

2. Campaign 2 (*Appendix A2*)

The second part of the 1995-2010 Lipitor campaign is quite different in its approach to addressing consumers from its somber, text-heavy counterpart. In this series of advertisements, very “normal”, representative models—a family, a pair of twins, a young woman—are pictured smiling appearing relaxed and happy. The only other visual cue in the ads is a series of numbers

indicating some of the models' characteristics, from height and weight to number of weekly workouts and apples eaten a day, as well as their cholesterol numbers. The message of the ads is very simple: high cholesterol is impossible to detect superficially, and can affect anyone. Even though the young woman is tall and thin—as the stated measurements prove—and is clearly beautiful and confident, she still has high cholesterol. Although the pair of twins pictured looks identical, weigh the same and have the same diet and exercise routine, one has high cholesterol while the other does not. In the family photo in which all members seem smiling and happy, three members have high cholesterol while a fourth does not. Although these people are smiling, they represent the very real threat of high cholesterol and the risks of heart attack and stroke stemming from it. The only difference between the low- and high-cholesterol figures featured, according to the ad, is Lipitor—and, the ads seem to suggest, it can solve the consumers' high cholesterol problem, too.

While the advertisers chose to use smiling, happy models, they in fact represent the ominous threat of high cholesterol and the increased risk of heart attack or stroke that accompanies it. This threat is even more alarming when considered in contrast with the seemingly obvious physical vitality and health of the subjects portrayed in the ads and further enforced by a caption in one of the ads that “high cholesterol doesn't care who you are.” In response to these threats, the advertisements invite the consumer to let Lipitor help “rewrite history.” The ads take a very clear stance in addressing the risk of high cholesterol—for those who are unable to control their cholesterol with diet and exercise alone, the only solution is Lipitor. This position is supported by some encouraging statistics, which claim a 30-60% reduction in cholesterol numbers in patients who take Lipitor compared to those who do not, but as with the first campaign the claims are not well supported. This finding is somewhat

incongruous with Lipitor's general tactic of appearing straightforward and forthcoming with the amount of information provided to readers. Especially in this subdivision of the campaign, there seems to be much more emphasis on emotional cues—such as the threat of high cholesterol to the happy family unit—than on factual information. The little text that is provided in the ad is dominated by authoritative, rather than substantive, warrants supporting the claims made in the ads. Instead of providing evidence to corroborate the claims made in the body of the text, the ad relies on the brand name's credibility and perceived expertise to suggest that Lipitor is a suitable choice for any patient.

The ad invokes several paradigmatic values to support its message. Once again, in contrast to the previous campaign's appeal to information and scientific rationality, in this campaign Lipitor's advertisers elected to emphasize the importance of family bonds, health, and happiness—reinforced by the ads' visual elements—and contrast these values with the vulnerability of mankind and the precariousness of health. This contrast is powerful because it taps into a very basic human fear of death, disease, and lack of control over circumstances. The advertisements' offer of a tool to control these fears is particularly appealing to an audience whose emotions have been activated and that is being expected to make decisions and carry out actions, such as deciding that Lipitor is an appropriate drug and seeking out a prescription from a physician, not based entirely on information and rational reasoning but rather stemming from the fear of losing control, happiness, and health, as the ads ever so subtly suggest.

The layout of the ad and the structure of the text further reinforce the predominance of emotional over rational appeals in the campaign. The visual element in the ads takes up most of the space in the two-page spread. There is some dry, technical information provided on the bottom left page of the ad, printed in small, cramped text. On the right page, however, the reader

is provided with a short narrative that presents “the bad news”, or problem of high cholesterol, and goes on to suggest Lipitor as the solution to this problem and “the good news”. The exclusive portrayal of positive outcomes in the ad series—even though the featured models are clearly at risk for heart attack or stroke, they now have a solution for this threat—is enticing and once again ties into the ads’ overall appeal to emotion. Although surely the consumer realizes that it is unrealistic to expect total efficacy and success from taking the drug, the visual cues—the smiles, the families, the encouraging cholesterol numbers of those models who take Lipitor—threaten to outshine the fear of the drug’s failure to control the consumers’ high cholesterol.

Several semiotic codes can also be identified in the ads to achieve its intended message. The underlying emphasis on the existence of a solution for the problem of high cholesterol is especially prominent in the advertisements. The desirability of Lipitor as a tool to beating a common affliction (“2 in 3 adults who control their diets and exercise cannot lower their cholesterol enough”) is also evident in the advertisements. The promise of improvement after taking the drug and Lipitor’s potency and ability to reduce the threat of heart attack or stroke are also important in creating the impression that while the threat to health may be real, a solution is also readily available and accessible with a simple prescription from a physician.

B. Zocor

1. Campaign 1 (*Appendix B1*)

The Zocor campaign from 1995 to 2010 can also be categorized into two main efforts. The first features all sorts of sentimental, emotion-evoking, family-themed images. The ads portray images including those of a couple walking along a sandy beach, a grandfather with his grandson, a wedding scene, an aging white couple in a warm embrace, a mother and her son, and

a laughing elderly couple. Clearly, the advertisers made significant efforts to represent a wide variety of people within the target demographic. Although one of the two pages of the spread is loaded with text, several phrases throughout the body are bolded or highlighted. All are variations on the subject of the future and of the reasons to address the threat of high cholesterol: “It’s your future. Be there”, “I have a lot of good reasons for taking care of my cholesterol”, “where will you be when your grandson gets his first taste of the ocean?”, and “where will you be when your wedding dress walks down the aisle a second time?”. While the models are featured in obviously happy, loving scenarios, the accompanying text is ominous in its suggestion that this happiness is threatened by high cholesterol and heart disease, effectively changing the tone of the ads entirely. The contrast between the relatable scenarios portraying tender moments in an individual’s life and the bold, almost harsh declaration of the text that this happiness is at risk is particularly effective at eliciting an emotional response, especially from an older demographic—the main age group at risk for cardiac conditions—for whom these appeals might strongly resonate. Suggesting that the individual has a major role in determining his/her future with slogans such as “how will you take care of your high cholesterol and heart disease?” the ads shift the responsibility to act from the physician onto the individual. By cueing an emotional response using such strong visual elements and in contrast with the almost-accusatory text, the advertisers draw in the now-panicked reader in search for a solution.

The ads’ modality is clear: the future is important, and is something to hope for and look forward to, but is constantly at risk. Luckily, according to the ads Zocor is not only effective, but can go as far as to save lives and ensure the consumer has reaches his/her future. This message is communicated through an informative, though not didactic narrative that turns the intimidating topic of disease and death into a more approachable and manageable experience for the lay

reader. Although there are not nearly enough substantive facts or statistics in the ads to reassure the reader that the drug itself is potent and effective, the narrative form of the text and its conversational flow are somewhat soothing and appealing to an intimidated reader. Nevertheless, the advertisements achieve credibility through the perceived competence of the pharmaceutical company and the drug itself “with more than 10 years of experience and 140 million prescriptions filled.” The strength of numbers presented here is compelling and increases the trustworthiness of the drug—if it was not safe and effective, 140 million scripts would not be issued for it. The advertisements make use of motivational warrants to support the major claims in the text, emphasizing the importance of securing one’s future and the possibility of doing so with the right medication.

The advertisement positions itself within the paradigmatic family common to communications in this particular market that rely primarily on emotional appeals—the importance of family, the emphasis on the future, and the threat presented by high cholesterol to these idyllic scenarios. By explicitly singling out the reader, with statements such as “it’s *your* future. Be there” and “how will *you* take care of your high cholesterol and heart disease?”, the ads also capitalize on the notion of control, self-determination, and possibility for change brought about by the individual. This call to action is effective in empowering and mobilizing the consumer, who is told that even things previously out of their control, like prescriptions for a pharmaceutical, are now accessible and within reach. The reader is given not only the power, but the authority and responsibility to take control of his/her health and future. And, according to the advertisements, Zocor is the solution to these very fears.

The syntax of the Zocor campaign is very significant. Because the reader is primed with such an aggressive onslaught of conflicting emotion—from the happiness in the images to the

threat of the bold slogans—the rest of the body of the text is important in guiding the reader towards the desired outcome of obtaining a prescription for the drug. The text itself is not overly technical or filled with medical jargon, but rather reads as a mild, even soothing explanation of the condition of high cholesterol and how Zocor offers the opportunity and the tool to address this concern. The text is informative and makes use of different font sizes and colors to maximize its effect. The result of these manipulations is a persuasive and calming advertisement that can placate and convince a now-worried reader whose emotions were triggered by the visual cues that initially catch the eye when skimming through magazine ads.

Optimism is an especially important value drawn on in the Zocor campaign. The suggestion that the individual has both the power and the opportunity to take charge of his/her future is powerful only when it is combined with the optimism and assurance that the effort will pay off and the reader will succeed in lowering his/her cholesterol and reduce risks of heart attack. This optimism is conveyed through visual elements, such as the image of the couple strolling on the beach, leaving behind two lawn chairs. The portrayal of the couple moving forward together is encouraging, soothing, and something many aging couples likely aspire to and hope for. The gentle suggestion by the text that Zocor is a potent and available solution to the problem of high cholesterol, which could devastate this idyllic future, acts as a powerful stimulant.

2. Campaign 2 (*Appendix B2*)

The second approach by Zocor is a bit different. The ad series features models in challenging conditions, such as a woman prepared for a hike, a woman caught in the rain, and a man ready to shovel tall piles of snow, and points out all of the protective gear and precautions taken against threats like hunger, thirst, the cold, or the elements that are present in those

situations. The figures in the ads are dressed warmly in layers and heavy coats, the hiker carries a water canteen and a hiking stick, the woman is wearing a raincoat, boots, and an umbrella, and the snow shoveler is equipped with a wool scarf, waterproof gloves, down jacket, insulated pants, all-weather boots, and a large shovel. The models are clearly prepared for the kind of activity they are about to partake in, and the ad asks in bold letters, “what are you doing to protect your heart?”. With all of the effort expended to protecting one’s health and well-being, the ad seems to argue, why neglect the heart? Most importantly, what are *you*, the reader, doing about your heart health? The visual and prominent textual cues seem to imply that the responsibility for maintaining a healthy heart lies primarily with the individual, and, moreover, that even the efforts already undertaken by the individual are not sufficient to protect the heart from threats like high cholesterol. Listing the protections taken by the models in the scenarios in which they are placed serves as an important similarity cue, which strikes a cord with the ads’ target demographic, which presumably is concerned with its health and well-being and is motivated to maintain them. Further, the major claims in the advertisements are strengthened by a cited study, conducted in Oxford University, which found that Zocor “is the first and only medication proven to significantly reduce the risk of heart attacks and stroke.” From a visual and symbolic perspective, then, the ads are relatable, persuasive, and—unlike many campaigns in this category—seem to even be backed by some credible findings, which are cited in the body of the text and lend the drug additional credibility.

The manufacturers of Zocor take a clear position in the ads as they urges consumers to seek prescriptions for the drug: since health is clearly important and a priority, the ad appears to argue, the consumer is virtually obligated to explore the possibility of Zocor with a physician. Since Zocor can help where an individual’s own ability to self-protect ends, it is the

responsibility of the consumer to consider Zocor as a viable treatment option for high cholesterol. The argument is underscored using authoritative warrants, which attempt to show that the product is credible and emphasize that not only does the problem of high cholesterol exist and present a considerable threat to heart health, but that Zocor has a solution for it.

By aggressively singling out the individual as the major responsible player in the commitment to heart health, the advertisements further draw on paradigmatic values including the right to self-preserve, be proactive, and fight even against things that normal efforts—such as controlled diet and exercise—cannot prevent. The approach of giving the consumer a real-life, relatable example of situations in which individuals must prepare themselves against risks that cannot be avoided or controlled for serves as a powerful and effective analogy for supplementing a routine of self-care with medications like Zocor, which can help protect heart health.

The message of the communication is further reinforced by the layout and syntax of the advertisements. Dedicating half of the advertising space to the visual component of the communication is important, as the image is an important element in the persuasive capital of the ad and adds a more accessible, relatable dimension to the argument. In addition, the arrangement of the text on the second page of the feature is neat, not overcrowded or loaded with medical jargon, and features text of the same size. It is important to consider that in contrast with many pharmaceutical advertisements, which include important considerations for the promoted drugs in tiny, illegible print, this series of ads uses equal sized text throughout. While the targeting of the individual is obvious in both the visual element and in the bolded text, the rest of the ads' content is treated as if of equal importance—from the description of the condition and the drug to its concerns and side effects. This feature may contribute to the ad's overall credibility and perception of honesty, as though Zocor, unlike its competitors, is frank about its limitations and

is concerned enough with the well-being of its future consumers to provide all necessary information up front and is not seen as trying to “hide” or withhold this important information from the consumer.

This series of ads also makes use of several semiotic codes that clarify the preferred reading of the communication. First, the assertion that a solution to the threat of high cholesterol exists, and the importance of the individual’s educated involvement in making drug-selection decisions, is reinforced throughout the ads and encourages the consumer to take a more active part in his/her health. Second, the ads draw on the spatial relatedness of heart health to other medical conditions, such as diabetes, for which an individual may already be treated. The advertisers seem to imply that, just as shown in the visual element of the ads, taking precautions against all sorts of risks is necessary and can be extended directly to include heart health and the elimination of threats like high cholesterol that can contribute to these conditions. Another important element of the argument made by the advertisers relates to the desirability of Zocor as a drug of choice to treat high cholesterol. With “over 160 million prescriptions for Zocor filled to lower cholesterol,” the drug’s popularity and market success give the impression that while Zocor is a powerful medication used to treat a serious condition, it remains safe for the general population, who is indulging wildly in its consumption. These assertions perpetuate the assumption that there is a pharmaceutical solution for every health concern, perhaps even for those who do not suffer from particularly high cholesterol levels. But since “everyone is doing it”, the drug’s desirability capital increases dramatically and may influence a reader’s decision to pursue a prescription for the drug. The advertisements’ treatment of heart health as part of a bigger problem also relates to this concern. This genus-species cue works in conjunction with the shift in the attribution of responsibility from physicians to individuals to prompt the consumer to

seek prescriptions because he/she is placed under the impression that they have not only the right, but the responsibility to seek treatment for their medical concerns. The availability of a pharmacological solution and the perceived awareness and individual responsibility greatly add to the ads' effectiveness and persuasiveness to a worried and unsure consumer.

C. Pravachol (*Appendix C*)

From 1995 to 2010, Pravachol released a series of ads featuring models representing different demographics, from a middle-aged male woodcutter to a young female swimmer to an elderly man. The varied demographics that are represented make the ads more personable and relatable to a wide variety of consumers. The models also all wear a similar, faint smiling expression that at first glance is comforting and appealing. On closer examination, however, it appears that the models are not as jolly as the generic figures depicted in other campaigns within the pharmaceuticals category. Instead, the models look tense, worried, even a bit solemn. The most prominent text in the advertisements is a quote from the model, which posits "I eat right and exercise to control my high cholesterol. Why should I worry about a first heart attack?". This statement suggests that the models, like the potential patients and consumers they represent, are somewhat naïve about a condition they may have that could be threatening their health and are helpless to either prevent or treat the condition. The ad featuring the elderly man states "Irene, I know how afraid you have been about having a stroke. So take some advice from your kid brother." The ad uses emotionally-stimulating cues to suggest that the population is at risk of heart attack and lacks the information and education to prevent this threat.

The worry expressed in the visual elements, manifested in the models' concerned expressions, as well as in the prominent text of the ad, shed light on the pharmaceutical

company's standpoint in the campaign. Unlike other campaigns that seek to empower the consumer and emphasize the importance of education and choice in the selection of a cholesterol-lowering drug, the advertisers for Pravachol seem to capitalize on the ignorance of the average consumer. The ads appear to suggest that Pravachol is the right choice for a consumer who, like the models depicted in the campaign, is worried about his/her health but is unaware or uneducated about the risks of heart disease. Since Pravachol, as the ad states, can "reduce the risk of a first heart attack up to one-third," and "could help you live a longer, healthier life," it is the "proven" solution to the threat of heart attack. The ads make Pravachol an appealing option for consumers by marketing it aggressively and achieve trustworthiness through the authority expressed in the text, which reassures consumers that Pravachol can treat even those problems the consumer was not aware of or informed about prior to seeing the advertisements. Advertisers made use of substantive and authoritative warrants in the ads' informative, factual content. Having caught the attention of the reader, pointed out his/her ignorance of the threat of heart attack, and warning that even efforts to reduce cholesterol such as controlling diet and exercise are "still not enough", the ads now provide the reader with text that is actually informative and educational about both the targeted condition and the drug itself.

The advertisements make use of rationality cues and information to persuade a consumer initially reeled in using emotional cues. This is achieved primarily by positioning Pravachol as a credible source that the reader can trust. While the populace traditionally entrusts its health to physicians and health care professionals, the Pravachol advertisements attempt to establish the drug company as a competing, if not superior, authority figure. Unlike advertisements by other pharmaceutical companies, the Pravachol ads urge the reader to ask his/her doctor about the drug only in the very last sentence of the text. The advertisements try to minimize the influence of the

physician in the drug selection process and undermine the power of the physician to make health-related decisions for patients. Since the uninformed consumer cannot protect his/her health alone, as even the best efforts are “still not enough”, Pravachol offers an appealing solution backed by studies and statistics that appears credible and is accessible to the consumer.

This appeal is further reinforced by the layout and effective organization of the elements in the advertisements. The clean, simple layout lends the ads a professional appearance. The text itself follows a logical, informative progression of addressing the question posited by the models in the ad, listing Pravachol’s strengths, and even explaining some of its side effects in the main body of the text. The text is all presented in one continuous unit and is of the same size throughout. The effort to appear fair and balanced in presenting information to the reader reinforces the drug company’s stance of altruistic concern for the unsuspecting, helpless consumer addressed in the ad. The informative part of the advertisements, in turn, indicates the company’s willingness to help the consumer and fosters trust in the brand.

The ads’ text and images draw on several cultural values that shape the communication’s preferred reading. The degree of risk of heart attack is emphasized, invoking the very real and prevalent concern of modern American society with health. The ads also use Americans’ emphasis on hard work and individual self-determination to emphasize that even despite the best efforts, health cannot always be maintained without pharmacological intervention. The potency of Pravachol and the feasibility of its success are especially appealing to consumers who may be wary of their physicians but are concerned about their health. Lastly, the ease of the solution to a threat that even efforts such as strict diet and exercise regimens, which require significant self control and determination, cannot manage, is also enticing.

D. Vytorin (*Appendix D*)

The Vytorin advertising campaign between 1995 and 2010 had a very different approach to marketing the drug than its competitors. The ads follow an identical template, where a bold heading reads “Vytorin treats the 2 sources of cholesterol” and below it pictures of a typically high cholesterol food—like onion rings or cupcakes—and a silly photo of an eccentric family member are displayed side by side. This more humorous approach to the threat of high cholesterol, while indeed addressing the problem directly, does so in a lighthearted manner. By neglecting to show the actual patient (in model form), or victim, of the threat of heart disease, the advertisements appeal to an audience that may be afraid of poor health and, specifically, of the negative repercussions of high cholesterol. By spinning the ad in a more cheery and funny direction, the manufacturers of Vytorin contend that while heart disease is a scary prospect that must be treated, there is no reason to panic. The ads don’t need to show happy models who survived heart attacks or concerned models with high cholesterol waiting for a stroke to strike; the elimination of the “victim” model takes the human out of the equation. All that is left, advertisers seem to suggest, is the drug therapy solution offered directly in the ad.

Below the images, a bolded sentence states Vytorin was proven to be more effective in lowering cholesterol than two of its biggest competitors in the category, Crestor and Lipitor, in clinical studies. The emphasis on the dissimilarity between Vytorin and its competitors, and Vytorin’s superiority over them, is an important element in the drug’s advertising strategy. None of the campaigns analyzed thus far employed the strategy of comparing the product directly to its market competitors. Instead of focusing on the condition and the patient, the ad focuses primarily on the product. The direct presentation of the drug may be more overt, even pushy, but in the context of the slightly comical advertisement it does not seem inappropriate.

The series of advertisements makes its superiority claims by making use of a recurring cue of the number two. By emphasizing that the drug treats the *two* sources of high cholesterol—diet and genetic factors—Vytorin claims to be better than its competitors. The advertisements also feature two images that correspond to the two sources of high cholesterol, a comparison to two of Vytorin’s market competitors, and display the remaining body of the text in two columns. Moreover, in the body of the text the advertisers explain that Vytorin actually contains two separate cholesterol medicines in a single tablet. In modern American society, a “one-stop solution” is particularly appealing. With the busy lifestyles and numerous health concerns bombarded at individuals and overwhelming them every day, multitasking—and a pill that claims to treat two conditions simultaneously—is instantly enticing. Since two are perceived to be better than one, consumers are sure to be impressed by what Vytorin has to offer in relation to other cholesterol-lowering drugs.

The credibility of the ads is reinforced by the “clinical studies” mentioned in the body of the text as well as the perceived potency of a drug containing two medicines in one pill. The ads’ message is very clear: Vytorin was proven to be more effective than its competitors alone, so it is powerful. Even though there is no reassuring image of a smiling model representing the successful use of the drug to overcome a threatening condition, the ads seem to belittle the seriousness of the condition by putting a humorous spin on the images in the advertisement. The ads appear to offer a simple, but extra-powerful, solution to a simple problem the consumer can even afford to laugh at.

With this approach, the Vytorin advertisements position the brand in a paradigm class that is less common in the pharmaceutical drug advertising industry. Although health is clearly not something to joke about, the ads offer a different take on the health and drug discourse. Since

Vyotrin is offering a solution to the problem, it appears that advertisers felt that displaying it in less-serious terms would not be perceived as offensive or disrespectful. On the contrary, there may well be consumers who, tired of the traditional scare tactics used in advertisements of this sort, may find this approach refreshing and persuasive. While the threat of heart disease is real, there may be many who feel that presenting and discussing the topic without dramatizing it is no less effective than threatening consumers with an impending heart attack should they fail to obtain a prescription for a cholesterol-lowering medication. Instead, bringing humor into the mix and simplifying a frightening scenario makes it more accessible to a lay audience.

The body of the text of the ad is also interesting. Unlike its more “serious” competitors, the Vytorin ads actually provide very little factual information. The text is restricted to the bottom third of the page of the ad, and wastes no time explaining the condition the drug treats for or its risks, jumping immediately to urging the reader to ask his/her doctor about Vytorin in the very first sentence. The rest of the text is devoted exclusively to singing the praises of the drug, once again comparing it to its leading competitors, and concludes with a very brief statement of the drug’s possible side effects. The size and arrangement of the text also echo this prioritization: from a giant statement that Vytorin treats two, not just one, sources of cholesterol, to a medium-sized proclamation of supremacy over two leaders in the market, to a small-font mention of possible risks and side effects of the drug. Vytorin’s position seems to take a position not of the concerned philanthropist, but of the bold company marketing its product.

The ads are persuasive because they draw on some very prevalent, current societal values. The competitive nature of American society makes superiority claims particularly effective to an audience impressed with superiority. Especially concerning an important issue like health, having the “best” product is important and a factor that is sure to lure consumers. The

very clear, emphasized difference between Vytorin and other comparable drugs in the market also adds to Vytorin's special and exclusive image. Consumers may also be drawn to Vyotrin's emphasis of its combination of two cholesterol-lowering agents in one pill. While in the medical field quantity may not surpass quality in considerations of importance, to the lay consumer this claim may be particularly enticing. Without more information about the drug—which the advertisement neglects to provide—consumers are left to rely on their previous knowledge and value doctrines, including the prevalent conviction that two are better than one.

E. Plavix (*Appendix E*)

Plavix's advertising campaign between the years 1995 and 2010 has not been entirely consistent. Unlike its main market competitors, whose ads can be easily identified because they are part of a cohesive campaign, Plavix's ads share certain similarities but are otherwise rather disparate. The main shared signifiers in the campaign, however, do stand out and isolate Plavix from other drug brands. Every single identified ad in the campaign includes both a physical image and a textual mention of the word "clot". Unlike its competitors, who appear to generally focus on the risks of high cholesterol and define that condition as the drugs' target, Plavix emphasizes the formation of clots in blood vessels. This distinction is important because it differentiates Plavix from its competitors and also introduces a condition fewer people—due to less advertising—are aware of, informed or concerned about. The emphasis on the word clot and its depiction in visual form creates a top-of-mind awareness for the consumer and primes the reader with the association of the word clot with a specific drug: Plavix. This recall could prove particularly important for a confused, uninformed consumer debating discussing a drug with a physician.

The Plavix ads, while all centering on the threat of a clot, do so in different ways. One ad features a hospital emergency sign displayed backwards, indicating that the reader is inside the hospital, having already experienced a blood clot-related condition and claiming “Plavix could help keep you from coming back.” Another ad introduces Bob, a large, formidable-looking construction worker and states “he’s no match for something one millionth his size: a clot.” Another ad simply displays with the word “clot” in bold font filled with images of a clogged artery. A final advertisement shows a large image of a blood vessel superimposed with the headline “with miles and miles of arteries in your heart and brain, all it may take is the formation of one clot.” The contrast of the blown-up, large images and size of the text with the size of the threat addressed in the ad—a tiny, but deadly, clot—is very powerful. The visual representation of a clear versus a blocked artery is also effective in making the threat appear real and menacing. The overall tone of the ads is grave and intimidating, appearing as an almost overt attempt to scare the reader.

The drug company’s position in the ads is very clear—if the consumer is at risk, an active intervention is required to potentially save his/her life. Since clots are the number one problem and risk for those who have been previously hospitalized for cardiac conditions, Plavix offers to help protect against their formation. Plavix differentiates itself from other drugs in its category because unlike other heart medicines, it focuses specifically on clots and works to strengthen other cholesterol and blood pressure medications. This information is given in a narrative, rather than a didactic, style, describing the target condition, the advantages of Plavix, and the risk information associate with the drug. Although the advertisements make a rather blunt, aggressive statement at the outset, threatening the reader with a deadly clot and displaying grim images of hospital signs and sturdy men who do not stand a chance even against something as tiny as a

clot, after this initial hook the ads revert to an attempt to assuage the fear cued by the visuals in the ad and provide the reader with information on how to avoid the threats mentioned previously. The emphasis on the difference of Plavix from its competitors and its slightly different function than most cholesterol-lowering or blood pressure-controlling medications is effective in emphasizing its importance. The ad tries to be persuasive without being pushy, explaining that since Plavix is different from other medications it is not competing with them directly but will, instead, help protect heart health more fully.

The ad achieves credibility by capitalizing on its dissimilarity from other drugs in the market. The ads use authoritative warrants to try to convince the reader that Plavix is a necessary addition to a heart health protection regimen because it is different from other brands. Although the ads do not bombard the reader with too much text and information, it is enough to impart Plavix's strengths and identify the target consumer for which it will be most effective. Without naming any of its competitors, Plavix is still able to make superiority and credibility claims about the efficacy and potency of the drug. Even though the validity of the major claims in the advertisements is not strongly corroborated, the ad seems authoritative and persuasive.

The Plavix campaign fits into the paradigmatic class of consumer intimidation. The emphasis on the fact that risk isn't always associated with size, and that something as small as a microscopic blood clot could prove lethal in minutes, is a frightening prospect for readers. In addition, the ads' suggestion that there is no surefire way to avoid clots further scares consumers and may make them more inclined to pursue a discussion about Plavix with their physicians just to decrease—though not entirely eliminate—the risk of something so ominous. Plavix's offer to help avoid blood clots, then, is somewhat reassuring after the visual, textual, and emotional onslaught of panic and intimidation initially cued by the advertisements.

The order of priorities in the ad can be clearly seen in its syntax and the text's arrangement throughout the layout. The visual element occupies the most space on the page, obviously meant to capture the reader's attention and cue the fear that will motivate further examination of the advertisement. The description of the drug follows, emphasizing the difference of Plavix from other heart health medications. Lastly, a very brief mention of the drug's side effects and important information is included at the bottom of the page in small, cramped text that does not invite perusal. The ads' use of texts—such as the emergency sign or the “clot” written in clogged arteries—is an effective way of promoting the drug in one element. The association between the brand name and the word “clot” appears to be a priority for the brand and is effectively achieved by playing up this element, in different ways, throughout the campaign.

The Plavix ads draw on several cultural values to entice the consumer to pursue a prescription of the drug from a physician. The insistence that “Plavix can help keep you from coming back [from the hospital emergency room],” is a powerful stimulant of a feeling of trust in the drug and of the existence of a solution to the health threat. The use of text as part of the visual element of the advertisements makes use of today's visual culture and tendency to focus more on visual elements than texts. By combining the two elements, the ads can promote Plavix's message faster and, arguably, more effectively than an ad that only promotes the drug in the body of its text. Lastly, society's general fear of death is capitalized upon in the ads' persistent assertions of the vulnerability and mortality of man. The ads are effective not because they are necessarily appealing in their message, which is on the whole a grim one, but by their offer for a tool that could help avoid the undesirable outcomes of a blood clot.

3. Channel factors

Channel factors, much like source factors, were kept constant in this analysis by purposely selecting advertising campaigns that were delivered in a similar fashion in comparable communication outlets and media. The choice of print media as the delivery venue for the campaigns studied holds several advantages for the type of analysis conducted here. Perhaps most importantly, print media's low level of interactivity with its reader, contrasted with its high level of selectivity in targeting a particular demographic, demands advertisements that are both explicit and personalized. In print, limited space and readers' attention compel advertisers to create advertisements that are clear in their purpose and presentation of the advertised product. In television, for instance, advertisers enjoy the luxury of being allotted a specific amount of time in which they are guaranteed the consumers' undivided attention (should they continue to watch television on the same channel). This gives advertisers the freedom to create advertisements whose purpose may not be obvious until the end of the commercial, when an announcer can tie the elements of the commercial to the object it is promoting and a large, bold product name and logo can be flashed across the television screen, imploring consumers to seek out the advertised product. On the other hand, print media must be more straightforward or else risks losing not only audience members' interest and attention but, fundamentally, full comprehension of the ad's objective. As a result, print advertisements tend to be more compact (due to size and spread limitations), explicit, and to the point than their television counterparts. These features also make print ads a manageable and controllable medium that is conducive to this study.

4. Receiver factors

The magazines from which advertisements were selected—*Time Magazine*, *Reader's Digest*, *People Magazine*, and *Newsweek*—were chosen precisely to control for receiver variability. While it is clear that these magazines attract a wide demographic group, as evidenced by their large circulation sizes and national popularity, this attribute is, in fact, beneficial to this analysis. As discussed above, heart conditions afflict members of the population irrespective of gender, race, or nationality. The only generalization that can be made sweepingly in this category is based on the age of the average heart disease-susceptible individual, which tends to be relatively high (50+) in comparison to the average population. Accordingly, publications that appeal to a wide demographic were essential in order to capture the full scope of cardiovascular condition treatment drugs, which are targeted at a broad subset of the national population.

Nevertheless, there are particular characteristics that can be attributed to readers of *Time Magazine*, *Reader's Digest*, *People Magazine*, and *Newsweek* which correspond with pharmaceutical drug companies' target audiences that are worth mentioning here. Studies have shown that although newspaper and newsmagazine readership is declining in favor of internet and television news consumption, the average age and affluence of readers is steadily increasing—to the delight of pharmaceutical drug advertisers. News magazines, like those selected for this study, attract news readers who generally tend to be older and have a significantly higher income than the U.S. adult population overall (Pew Research Center, 2004). Along the same vein, based on both the content of the magazines themselves and the socio-economic attributes of the audiences attracted to these media channels, it can be assumed that the average news magazine-consuming population is relatively educated. These factors are important to pharmaceutical drug advertisers, as the kind of ads and appeals designed to sell the particular product must be well-tailored to its target demographic. In addition, this broadly-defined

demographic makes up precisely the target market pharmaceutical companies are seeking out: older, and thus more likely to be afflicted with some sort of (heart) health condition; wealthier, or with enough of a disposable income to consider brand-name, rather than generic, drugs for their health concerns; and more educated, and therefore possibly more inclined to read through the ad, understand its general claims, and be more motivated to seek out a prescription from their physician based on their self-diagnosis.

5. Destination factors

Finally, by selecting drugs from within the same pharmacological family that are targeted at the same broad demographic, the study attempted to control for the destination factors, or outcomes promoted by the communication. As with all direct-to-consumer advertisements, the objective of the advertisements is overt and clearly stated in every single ad: “Ask your doctor”. While this directive may, as studies have shown, imply more that the consumer should trouble their physicians for a prescription rather than obtain additional information about a particular drug from them, this objective is a hallmark of the direct-to-consumer trend. Since the premise of this form of advertising is that the consumer is being educated directly by the pharmaceutical companies, thus eliminating any risks of bias or pay-off of their doctors from the drug manufacturers, the destination objective is identical for all of the cases studied in this analysis.

V. Discussion

The individual examination of the advertising campaigns for the cardiac drugs Lipitor, Zocor, Pravachol, Vytorin, and Plavix (see results section) revealed a broad range of tactics employed by advertisers to entice consumers to seek a prescription for the drugs from a physician. Through a variety of techniques—including scare tactics, emotional appeals, and rationality appeals—advertisers have created campaigns that are persuasive and elicit compliance from consumers to purchase brand-name drugs. Now, a comparative and holistic evaluation is also warranted in order to draw some broad conclusions about these techniques and the concerns that arise with their use.

Especially notable in the comparison between the approaches of the various pharmaceutical companies to marketing their products is the type of appeal made to the consumer. Lipitor and Pravachol's attempt to give the consumer as much factual—yet comprehensible—information contrasts sharply with Zocor's personalized narrative style and emotional appeals, Vyotrin's humorous approach, and Plavix's scare tactics. Since these drugs are all targeted at the same demographic, it is illuminating to study their varying, but presumably comparably persuasive, methods of appeal. As it is known that all five drugs have enjoyed considerable market success, it seems that in addition to being apparently superior and effective drugs, the marketing campaigns designed for these pharmaceuticals have also been particularly persuasive to consumers, which has been reflected in their high sales numbers and market dominance. It is evident, then, that there is no single effective way of appealing to a rather wide, differentiated demographic that is defined more by its age range of 50+ than by any other demographic factor such as gender, race, or nationality. Attempting to keep all other factors as

equal as possible, it appears that emotional, fear, and rationality cues are all effective in catching consumers' attention and raising awareness of the drugs.

Perhaps that most evident, recurring theme emerging from the advertising campaign analyses is the sweeping move by pharmaceutical companies to empower the consumer and motivate him/her to seek a prescription for a particular drug. This shift of responsibility for the health of the individual from the traditionally-accountable physician directly to the patient him/herself is, as discussed previously, a characteristic feature of the direct-to-consumer strategy and constitutes a radical change in the established social roles of members of society. This change brings into question the power of physicians today, who as a result of this move are relegated to a role of prescription filling rather than of advising or initiating treatments. Although the physician is the ultimate gatekeeper for pharmaceutical distribution as controller of the prescription pad, as studies have shown doctors are feeling—and acting on—increased pressure from patients that has resulted in an influx of prescriptions for brand name drugs, even when such a prescription is not deemed entirely appropriate by the physician him/herself. In addition, while it is undoubtedly important that patients exercise some control over what medications they are being prescribed and are provided with sufficient information to make educated decisions about their health care routines, previous studies have also shown that the average American consumer does not possess adequate education or reading skills to make such informed decisions. This study's findings, then, strongly support previous literature that has raised concerns about the appropriateness of addressing the consumer directly without the participation of an informed mediator intervening in the process. Feeling legitimate in their concern for their health and authorized to make decisions about pharmaceutical treatments, patients could prove

difficult to persuade or reason with when confronting a physician and demanding a prescription for a particular drug.

Another major problem raised by the literature and supported in this study is the lack of information made available to consumers in the advertisements themselves, rather than in the FDA-required additional information sections detailing the drugs' common side effects, risks, and active ingredient information. First and foremost, the physical presence of this information is minimized by placing the information behind, rather than opposite, the actual advertisement in the magazines. That way, for more information a consumer would have to actively seek out the information by turning the page and reading its back side instead of having it readily displayed opposite the relevant ad. Not a single advertisement collected in the microfilm archives displayed the risk information next to the creative component of the advertisement. Further, the small, cramped text on the back page is made unappealing enough to discourage close reading even by a concerned or interested consumer.

While this study did not analyze or evaluate the factual validity of the information and claims in the ads, it was exceedingly evident that even within the creative element of the advertisement, where the majority of the space was taken up by visuals or persuasive text rather than with factual information about the drugs, advertisers used various tactics to "hide" any actual information about the drug within the body of the text. As other studies have shown previously, the campaign analyses revealed that the ads tend to skim over important drug information and attempt to minimize the consumer's exposure to facts that may deter the consumer from pursuing a prescription. As a result, the major claims made in the body of the text about things like the drug's efficacy or potency went largely unsupported. The few statistics that were used in the ads seemed nonspecific and were not credited to any particular source or were

otherwise qualified. Any assurance of the drug's safety or effectiveness was presented in the form of a statement claiming that the drug has been tested in clinical studies at a certain laboratory, though these claims were not expounded using any findings or backed by any relevant evidence. In all, the claims made in the advertisements were not well supported and did little to actually inform the consumer about the drugs' qualities.

Another major recurring theme in the advertising campaigns analyzed was the insistence on showing only the positive outcome of the threat of heart disease when confronted with the particular pharmaceutical the ad is trying to promote. Not only may the drug not work for every patient, but the list of side effects and possible risks just from taking the drug could result in very unpleasant circumstances. Nevertheless, the advertisements for Lipitor, Zocor, and Pravachol—regardless of the types of cues each used to create a persuasive message—showed only smiling, happy-seeming models who, it can be inferred, took the advertised drug and are now free of the threat of heart attack, stroke, or blood clots. Vytorin and Plavix, on the other hand, avoided this problem entirely by choosing not to use models in their advertisements at all. While the emphasis on using highly relatable and happy models in the advertisements to entice consumers seems logical and obvious, it carries significant risk on the part of the consumer. Combined with previously-discussed elements such as the tendency to minimize the availability of information about the drug and the increased pressure on the patient to act as his/her own health advocate, the minimization of the appearance of risk and the assurance of safety and efficacy can be misleading and dangerous. The amount of rational, unbiased thinking a consumer who has been drawn in by a fear or emotional appeal like the threat of death or missing major life milestones can be expected to possess is minimal. Such a consumer, blinded by the smiling models that assure that the drug will solve all the patients' problems, is severely compromised in a decision-

making scenario. Without proper information to provide a “reality check” to counteract the scenarios depicted in the advertisements, it would be difficult for any individual to critically question the association the advertisements create between a frightening situation like heart disease and the promise of a tool to reduce its risks, as demonstrated by an enthusiastic and smiling model.

The promise of a “miracle drug” to solve life’s various problems draws on yet another important theme worthy of discussion that is one of the major repercussions of the direct-to-consumer advertising strategy. Previous literature has argued that one of the greatest risks posed by this promotional tactic is the medicalization of modern American society. According to this argument, Americans are being socialized to believe that every ill can be cured with the aid of a pharmaceutical. Instead of self-improvement in the form of lifestyle, diet, or exercise changes, pharmaceutical companies capitalize on the claim that consumers need not change their current way of life but can still solve their health problems with the simple addition of a particular drug to their daily regimen. While this is undoubtedly a tempting proposition, it is also painfully unrealistic. Even though patients really cannot fully control their cholesterol levels and risk of heart attack or blood clots, as many of the determining factors of these conditions are genetic, there are lifestyle changes that can be implemented to reduce cholesterol and lower the risk for some of these conditions. The suggestion by pharmaceutical companies that the risk of these conditions can be dissipated with a prescription for a particular advertised drug not only presents the options available to the consumer inaccurately, but also directly contributes to an increased consumption of expensive, brand-name drugs that have been raising health care costs. Beyond the discussion of the monetary and economic repercussions of the direct-to-consumer trend, which is not the focus of this analysis, the assertion that all health problems can be treated

pharmacologically is dangerous. Consumers who are not encouraged to make healthier life choices may be more likely to develop multiple health conditions that are caused by environmental (rather than genetic) factors in the future, which will require additional drug treatments. The lack of emphasis in these advertising campaigns on the risks associated with pharmacological treatments further play down the patient's role in determining and controlling their own health. In stark contrast with the movement by the pharmaceutical industry to empower the individual as a consumer that can make his/her own choices and is prepared to spend money on pharmaceuticals to preserve his/her health, the role of the individual as the healthy, fit maintainer of general health and maker of sound choices that promote well-being is sorely diminished.

Textual analysis can be a useful tool for evaluating some of the prevalent values of the society for which the analyzed text is constructed. This form of analysis reveals the types of values present in culture and advertisers' manipulation of these values to create a desired effect. The analysis conducted here uncovered several important values which, used correctly by advertisers, have elicited a consumer response in the form of sales and significant market success. The expert use of visuals, the ubiquitous presence of an assuring figure or statistic, and the emphasis on quick, easy, and powerful solutions stem directly from modern culture's demands. Today's visual culture practically demands advertisements that are visually appealing and enticing rather than informative. Advertisers would be much less inclined to create ads that are crowded with text (and include important information), because consumers have shown a lack of time, interest, and draw to such communications. The general trust in numbers and statistics has also prompted advertisers to display at least one such statement prominently in all ads analyzed. It seems that even when the claims in the advertisements are largely unqualified

and unsubstantiated, they are still effective in establishing credibility for the brand and trust in the drug. This inclination to trust statistics without proper evidence or confirmation could be dangerous, especially in the drug arena where most consumers are simply not well enough informed or properly educated to make reasoned decisions.

Today's fast-paced, non-stop world calls for fast and easy products. This need is also reflected in the advertising strategy for these goods, which is designed more to catch the consumer's attention and draw it away from competing stimuli rather than to inform. In the case of pharmaceuticals, this tendency is particularly worrisome. In a field where it is essential to be well informed, and the average consumer is not, and where the role of the physician is showing worrying signs of diminishing in influence, the complex nature of the product cannot be communicated in an advertisement that is designed to be eye catching above all else. Advertisers, it can be argued, are simply responding to social trends. But, it is important to note, they are also perpetuating them. This is a unique power that must be carefully weighed in deliberations for future policies to regulate this form of advertising.

Recently, new developments in the pharmaceutical arena threaten to change the current status-quo of brand-name drug domination of the pharmaceutical market. This market remains a lucrative, "booming opportunity" that companies vie to dominate (Sanders, 2001, p. 4); moreover, it shows signs of expanding even further as developments such as the National Institutes of Health revising and lowering the cholesterol number that indicates a person is at risk for cardiac conditions associated with high cholesterol take place. This move alone drastically increases the number of Americans are now considered eligible for cholesterol-lowering medications from 12.5 million to 36 million (Sanders, 2001, p. 4). As major-name, market-

dominating pharmaceuticals such as Lipitor and Plavix lose patent protection, generic-brand drugs will quickly flood the market with cheaper versions of the drugs and will jeopardize the monopoly currently enjoyed by the market leaders (Iskowitz, 2011, p. 38). This pressure for continued success is pushing pharmaceutical companies to invest resources in developing new approaches to treating conditions, discovering new active ingredients, and maximizing the effectiveness and potency of their drugs. Surely, these changes will be reflected in the companies' future advertising campaigns as they struggle to compete with their cheaper, generic counterparts. While it remains unclear if this fear of overtake by generics will be realized, the effect of these changes on product and advertising strategy will be interesting to observe and would serve as an important object for further study.

References

- Associated Press. (2010). A look at most-advertised prescription medicines. ABC News.
Retrieved from <http://abcnews.go.com/Business/wireStory?id=10024509>
- Aikin, K. J. (2002). Direct-to-consumer advertising of prescription drugs: Patient survey results. U.S. Food and Drug Administration, Division of Drug Marketing, Advertising and Communications. Retrieved from <http://www.fda.gov/cder/ddmac/presentations.htm>.
- Aikin, K. J. (2003). Direct-to-consumer advertising of prescription drugs: Physician survey preliminary results. U.S. Food and Drug Administration, Division of Drug Marketing, Advertising and Communications. Retrieved from <http://www.fda.gov/cder/ddmac/presentations.htm>.
- Avorn, J. (2003). Advertising and prescription drugs: Promotion, education, and the public's health. *Health Affairs*. Retrieved from http://www.healthaffairs.org/WebExclusives/Pharma_Web_Excl_022603.htm.
- Becker, L. & Huh, J. (2005). Direct-to-consumer prescription drug advertising: understanding its consequences. *International Journal of Advertising*, 24(4), 441-466.
- Bell, R.A., Kravitz, R.L. & Wilkes, M.S. (1999). Advertisement-induced prescription drug requests: Patients' anticipated reactions to a physician who refuses. *The Journal of Family Practice*, 48(6), 446-452.
- Bradley, L. R. & Zito, J. M. (1997). Direct-to-consumer prescription drug advertising. *Medical Care*, 35(1), 86-92.
- Brinberg, D. & Morris, L. A. (1987). Advertising prescription drugs to consumers. *Advances in Marketing and Public Policy*, 1, 1-40.
- Bullock, R. (2006). *The Norton Field Guide*. New York: Norton.

- Calfee, J.E. (2002). Public policy issues in direct-to-consumer advertising of prescription drugs. Retrieved from <http://www.ftc.gov/ogc/healthcare/calfeedtcjppm.pdf>
- Chandler, D. (2002). *Semiotics: The Basics*. New York: Routledge.
- Cohen, E. P. (1988). Direct-to-the-public advertisement of prescription drugs. *New England Journal of Medicine*, 318, 373.
- Consumer Reports. (1996). Drug advertising: Is this good medicine? *Consumer Reports*, 61(6), 62–63.
- Consumer Reports (2003). Free rein for drug ads? *Consumer Reports*, 68(2), 33-37.
- Cline, R.J.W & Young, H.N. (2004). Marketing drugs, marketing health care relationships: a content analysis of visual cues in direct-to-consumer prescription drug advertising. *Health Communication*, 16(2), 131-157.
- Everett, S.E. (1991). Lay audience response to prescription drug advertising. *Journal of Advertising Research*, 31(2), 43–49.
- Findlay, S. D. (2001) Direct-to-consumer promotion of prescription drugs: economic implications for patients, payers and providers. *Pharmacoeconomics*, 19, 109-119.
- Food and Drug Administration. (2008). Keeping Watch Over Direct-to-Consumer Ads. Retrieved from http://www.fda.gov/consumer/updates/dtc_advertising093008.
- Freeman, L. (2008). Aggressive strategy helps propel Claritin to top slot. *Advertising Age*, 69(11), S6-S7.
- Gellad, Z.F. & Lyles, K.W. (2007). Direct-to-consumer advertising of pharmaceuticals. *The American Journal of Medicine*, 120, 475-480.
- Hollon, M.F. (1999). Direct-to-consumer marketing of prescription drugs: Creating consumer demand. *Journal of American Medical Association*, 281(4), 382-384.

- Iskowitz, M. (2011). Cardiovascular. *Medical Marketing and Media*, 46(2), 38.
- Kaiser Family Foundation. (2001). Understanding the effects of direct-to-consumer prescription drug advertising. Menlo Park, CA.
- Kaiser Family Foundation. (2002). Trends in direct-to-consumer advertising of prescription drugs. Menlo Park, CA.
- Kaphingst, K., Dejong, W., Rudd, R.E. & Daltroy, L.H. (2004). Analysis of direct-to-consumer television prescription drug advertisements. *Journal of Health Communication*, 9, 515–528.
- Kaphingst, K. & Dejong, W. (2004). The educational potential of direct-to-consumer prescription drug advertising. *Health Affairs*, 23(4), 143-150.
- Mayo Clinic. (2010). Cholesterol Medications: Consider the Options. Retrieved from <http://www.mayoclinic.com/health/cholesterol-medications/HB00042>
- McGuire, W. J. (1984). Public communication as a strategy for inducing health-promoting behavioral change. *Preventive Medicine*, 13, 299–319.
- Morris, L.A. Brinberg, D. & Plimpton, L. (1984). Prescription drug information for consumers: An experiment of source and format. *Current Issues and Research in Advertising*, 1(1), 65–78.
- Most popular magazines: Best selling magazines. (2010). <http://www.magazinecost.com/popular-magazines/>.
- National Institute for Health Care Management. (2000). Prescription drugs and mass media advertising. *Research Brief*. <http://www.nihcm.org/pdf/DTCbrief.pdf>
- Pew Research Center (2004). 2004 Annual Report: Magazine Audience. <http://www.journalism.org/node/575>

- Perri, M. & Dickson, W.M. (1988). Consumer reaction to a direct-to-consumer prescription drug advertising campaign. *Journal of Health Care Marketing*, 8(2), 66-69.
- Petroshius, S.M. Titus, P.A. & Hatch, K.J. (1995). Physician attitudes toward pharmaceutical drug advertising. *Journal of Advertising Research*, 35(6), 41-51.
- Pinto, M. B. (2000). On the nature and properties of appeals used in direct-to-consumer advertising of prescription drugs. *Psychological Reports*, 86, 597-607.
- Reeves, K. N. (1998). Direct-to-consumer broadcast advertising: Empowering the consumer or manipulating a vulnerable population? *Food and Drug Law Journal*, 53, 661-679.
- Roderick, H.P. (1997). *Modern Rhetorical Criticism*. New York: Allyn and Bacon.
- Rosenthal, M. B., Berndt, E. R., Donohue, J. M., Frank, R. G., & Epstein, A. M. (2002). Promotion of prescription drugs to consumers. *New England Journal of Medicine*, 346(7), 498-505.
- Roth, M. S. (1996). Patterns in direct-to-consumer prescription drug print advertising and their public policy implications. *Journal of Public Policy and Marketing*, 15(1), 63-75.
- Sanders, L. (2001). Aiming to stay no. 1. *Advertising Age* (Midwest region edition), 72(50), 4.
- Spain, W. (1999). Despite small advertising budget, Lipitor is no. 1 in category: Other cholesterol-control drugs raise ad awareness". *Ad Age*,
<http://adage.com/article/news/despite-small-ad-budget-lipitor-is-no-1-in-category-other-cholesterol-control-drug-ads-raise-awareness/63140/>
- Stern, B. (1996). Textual analysis in advertising research: Construction and deconstruction of meanings. *The Journal of Advertising*, 25(3), 61-73.

- T'Hoën, E. (1998). Direct-to-consumer advertising: For better profits or for better health. *American Journal of Health-System Pharmacy*, 55, 594–597.
- Talley, C. R. (1997). Direct-to-consumer prescription drug advertising. *American Journal of Health-System Pharmacy*, 54, 2181.
- Terzian, T. V. (1999). Direct-to-consumer prescription drug advertising. *American Journal of Law and Medicine*, 25(1), 149–167.
- Thorpe, K.E., Florence, C.S. & Joski, P. (2004). Which medical conditions account for the rise in health care spending? *DataWatch: Health Spending*, 25 August 2004.
- Top medical conditions cost \$500 billion. (2008). *United Press International*. Retrieved from http://www.upi.com/Health_News/2008/01/25/Top-medical-conditions-cost-500-billion/UPI-85521201291718.
- U.S. Food and Drug Administration (FDA). (1999). Guidance for industry, consumer-directed broadcast advertisements. U.S. Food and Drug Administration, U.S. Department of Health and Human Services. <http://www.fda.gov/cder>.
- Weissman, J. S., Blumenthal, D., Silk, A. J., Zapert, K., Newman, M., & Leitman, R. (2003). Consumers' reports on the health effects of direct-to-consumer drug advertising. *Health Affairs*. http://www.healthaffairs.org/WebExclusives/Pharma_Web_Excl_022603.htm.
- Whyte, J. (1993). Direct consumer advertising of prescription drugs. *Journal of the American Medical Association*, 268(25), 146-150.
- Wilkes, M. S., Bell, R. A., & Kravitz, R. L. (2000). Direct-to-consumer prescription drug advertising: Trends, impact, and implications. *Health Affairs*, 19(2), 110–128.

Woloshin, S. (1991). Direct-to-consumer advertisements for prescription drugs: What are Americans being sold? *Lancet*, 358, 1141-46.

Appendix A1: Lipitor

Appendix A2: Lipitor

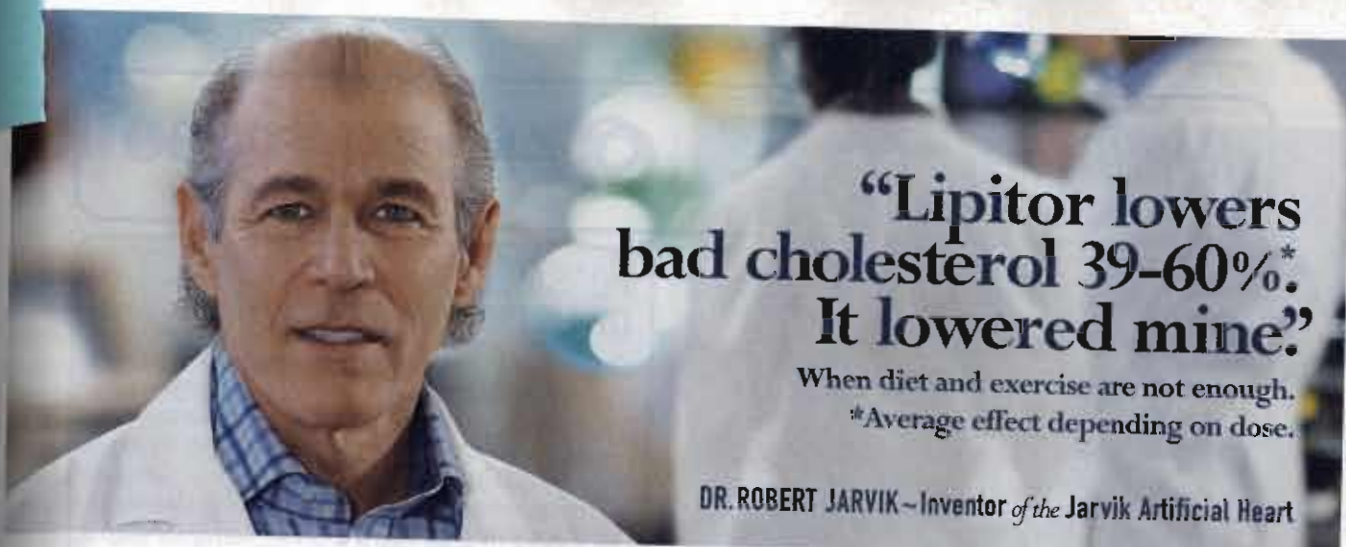
Appendix B1: Zocor

Appendix B2: Zocor

Appendix C: Pravachol

Appendix D: Vytorin

Appendix E: Plavix



**“Lipitor lowers
bad cholesterol 39-60%*.
It lowered mine.”**

When diet and exercise are not enough.
*Average effect depending on dose.

DR. ROBERT JARVIK - Inventor of the Jarvik Artificial Heart

**And I take Lipitor because
it does even more than lower
my cholesterol.**

- Unlike some cholesterol-lowering medicines, Lipitor is approved by the FDA to reduce the risk of heart attack, stroke and certain kinds of heart surgery if you have several common risk factors for heart disease.
- Lipitor is one of the most researched medicines with over 400 ongoing or completed clinical studies.

Ask your doctor.
Call 1-888-LIPITOR (1-888-547-4867)
Or find us on the web at www.lipitor.com

IMPORTANT INFORMATION: LIPITOR is a prescription drug. It is used in patients with multiple risk factors for heart disease such as family history, high blood pressure, age, low HDL ('good' cholesterol) or smoking to reduce the risk of heart attack, stroke and certain kinds of heart surgery. When diet and exercise alone are not enough, LIPITOR is used along with a low-fat diet and exercise to lower cholesterol.

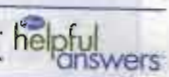
LIPITOR is not for everyone. It is not for those with liver problems. And it is not for women who are nursing, pregnant or may become pregnant. If you take LIPITOR, tell your doctor if you feel any new muscle pain or weakness. This could be a sign of rare but serious muscle side effects. Tell your doctor about all medications you take. This may help avoid serious drug interactions. Your doctor should do blood tests to check your liver function before and during treatment and may adjust your dose. The most common side effects are gas, constipation, stomach pain and heartburn. They tend to be mild and often go away.

Please see additional important information on next page.

When diet and exercise alone are not enough, adding LIPITOR can help. LIPITOR is one of many cholesterol-lowering treatment options that you and your doctor can consider.



Uninsured? Need help paying for medicine? Pfizer has programs that can help, no matter your age or income. You may even qualify for free Pfizer medicines. Call 1-866-706-2400. Or visit www.pfizerhelpfulanswers.com.



IMPORTANT FACTS



LIPITOR
atorvastatin calcium
tablets

(LIP-ih-tore)

LOWERING YOUR HIGH CHOLESTEROL

High cholesterol is more than just a number, it's a risk factor that should not be ignored. If your doctor said you have high cholesterol, you may be at an increased risk for heart attack. But the good news is, you can take steps to lower your cholesterol.

With the help of your doctor and a cholesterol-lowering medicine like LIPITOR, along with diet and exercise, you could be on your way to lowering your cholesterol.

Ready to start eating right and exercising more? Talk to your doctor and visit the American Heart Association at www.americanheart.org.

WHO IS LIPITOR FOR?

Who can take LIPITOR:

- People who cannot lower their cholesterol enough with diet and exercise
- Adults and children over 10

Who should NOT take LIPITOR:

- Women who are pregnant, may be pregnant, or may become pregnant. LIPITOR may harm your unborn baby. If you become pregnant, stop LIPITOR and call your doctor right away.
- Women who are breast-feeding. LIPITOR can pass into your breast milk and may harm your baby.
- People with liver problems
- People allergic to anything in LIPITOR

BEFORE YOU START LIPITOR

Tell your doctor:

- About all medications you take, including prescriptions, over-the-counter medications, vitamins, and herbal supplements
- If you have muscle aches or weakness
- If you drink more than 2 alcoholic drinks a day
- If you have diabetes or kidney problems
- If you have a thyroid problem

ABOUT LIPITOR

LIPITOR is a prescription medicine. Along with diet and exercise, it lowers "bad" cholesterol in your blood. It can also raise "good" cholesterol (HDL-C).

LIPITOR can lower the risk of heart attack or stroke in patients who have risk factors for heart disease such as:

- age, smoking, high blood pressure, low HDL-C, heart disease in the family, or
- diabetes with risk factor such as eye problems, kidney problems, smoking, or high blood pressure

POSSIBLE SIDE EFFECTS OF LIPITOR

Serious side effects in a small number of people:

- **Muscle problems** that can lead to kidney problems, including kidney failure. Your chance for muscle problems is higher if you take certain other medicines with LIPITOR.

- **Liver problems.** Your doctor may do blood tests to check your liver before you start LIPITOR and while you are taking it.

Symptoms of muscle or liver problems include:

- Unexplained muscle weakness or pain, especially if you have a fever or feel very tired
 - Nausea, vomiting, or stomach pain
 - Brown or dark-colored urine
 - Feeling more tired than usual
 - Your skin and the whites of your eyes turn yellow
- If you have these symptoms, call your doctor right away.

The most common side effects of LIPITOR are:

- Headache
- Constipation
- Diarrhea, gas
- Upset stomach and stomach pain
- Rash
- Muscle and joint pain

Side effects are usually mild and may go away by themselves. Fewer than 3 people out of 100 stopped taking LIPITOR because of side effects.

HOW TO TAKE LIPITOR

Do:

- Take LIPITOR as prescribed by your doctor.
- Try to eat heart-healthy foods while you take LIPITOR.
- Take LIPITOR at any time of day, with or without food.
- If you miss a dose, take it as soon as you remember. But if it has been more than 12 hours since your missed dose, wait. Take the next dose at your regular time.

Don't:

- Do not change or stop your dose before talking to your doctor.
- Do not start new medicines before talking to your doctor.
- Do not give your LIPITOR to other people. It may harm them even if your problems are the same.
- Do not break the tablet.

NEED MORE INFORMATION?

- Ask your doctor or health care provider.
- Talk to your pharmacist.
- Go to www.lipitor.com or call 1-888-LIPITOR.



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Dnbln, Ireland
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LPIF Rev 2, Dec 2005

LPU00063AA

Milesto

DIED YOU KNOW THE TY of '80s rocker—tight pants, bleached hair, long tongue. Though pop metal (or, to some, "hair metal") is often remembered for big-name bands like Twisted Sister and Mötley Crüe, Kevin Dubrow, the front man for Quiet Riot, was a key force in popularizing the genre. His frequent diatribes against other musicians—and his own record company—could grate. But his gravelly vocals on songs like *Cum on Feel the Noise* helped propel Riot's 1983 album, *Metal Health*, to No. 1 on *Billboard*'s pop charts, a first for a metal band. Dubrow had just finished a U.S. tour to promote Riot's 2006 album *Rehab*. He was 52 and died of unknown causes.



Dubrow
IN 1981, WHEN THE FIRST cases of AIDS were emerging, few doctors knew what the disease was, much less how to treat it. But as chief of medicine at San Francisco General Hospital, infectious diseases expert Merle Sanborn recognized the impending epidemic and began putting together a plan for tackling the disease. By 1983 he had successfully lobbied for a

APPRECIATION

Tragedy off the

After a few years of growing Washington Redskins safe leading his footing, both as a player and as a coach. Then on Nov. 10, his daughter slept, an infant who died the next day. The

December 10, 2007

"I never thought
it could happen
to me.
A heart attack at 53."

~Steve A.
New York, NY
Heart attack: 1/9/2008



"I had been feeling fine. But turns out my cholesterol and other risk factors* increased my chance of a heart attack. Now I trust my heart to Lipitor. Talk to your doctor about your risk and about Lipitor."

- Adding Lipitor may help, when diet and exercise are not enough. Unlike some other cholesterol-lowering medications, Lipitor is FDA-approved to reduce the risk of heart attack and stroke in patients with several common risk factors, including family history, high blood pressure, low good cholesterol, age and smoking.
- Lipitor has been extensively studied with over 16 years of research. And Lipitor is backed by 400 ongoing or completed clinical studies.

*Patient's risk factors include age, gender, smoking, and high blood pressure.

IMPORTANT INFORMATION: LIPITOR is a prescription drug. It is used in patients with multiple risk factors for heart disease such as family history, high blood pressure, age, low HDL ('good' cholesterol) or smoking to reduce the risk of heart attack, stroke and certain kinds of heart surgeries. When diet and exercise alone are not enough, LIPITOR is used along with a low-fat diet and exercise to lower cholesterol.

LIPITOR is not for everyone. It is not for those with liver problems. And it is not for women who are nursing, pregnant or may become pregnant. If you take LIPITOR, tell your doctor if you feel any new muscle pain or weakness. This could be a sign of rare but serious muscle side effects. Tell your doctor about all medications you

take. This may help avoid serious drug interactions. Your doctor should do blood tests to check your liver function before and during treatment and may adjust your dose. The most common side effects are gas, constipation, stomach pain and heartburn. They tend to be mild and often go away.

LIPITOR is one of many cholesterol-lowering treatment options that you and your doctor can consider.

Please see additional important information on next page.



Have a heart to heart with your doctor about your risk. And about Lipitor.
Call 1-888-LIPITOR (1-888-547-4867) or visit www.lipitor.com/steve

You are encouraged to report negative side effects of prescription drugs to the FDA.

Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

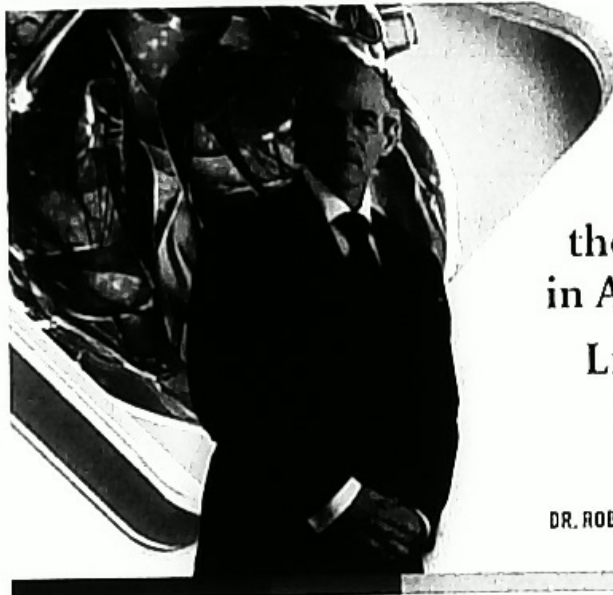
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- 36 Singer Jackson and actress Leigh
- 37 Harrison Ford thriller, *Air Force* _____
- 38 "Short People" by Randy _____
- 41 Interview with _____ Vampire, with Brad Pitt and 41 Across
- 42 "A _____ Day's Night" by the Beatles
- 43 R&B singer India _____
- 44 "The First Time _____ I Saw Your Face" by Roberta Flack
- 45 Shark _____ (animated comedy)
- 46 Mixed metals and minerals
- 47 "My _____ Thirty Years" by Tom McGraw

Answers to last week's Puzzler

P	A	R	K	A	F	E	W	P	H
O	M	I	C	O	L	E	A	X	I
R	Y	A	M	P	H	I	L	L	I
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F	O	O	H	I	S	A	D	O	W
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O	H	I	T	E	S	O	N	I	V
O	H	I	T	E	S	A	D	A	M
H	A	S	T	E					



“Heart disease is the #1 health problem in America. Stroke is #3.

Lipitor helps reduce the risk of both.”

DR. ROBERT JARVIK – INVENTOR OF THE JARVIK ARTIFICIAL HEART

Unlike some cholesterol-lowering medications, Lipitor has been approved to reduce the risk of heart attack and stroke if you have several common risk factors for heart disease. Risk factors include family history, high blood pressure, age, low HDL (‘good’ cholesterol) or smoking. Along with diet and exercise, Lipitor lowers bad cholesterol 39-60%.*

*Average effect depending on dose

IMPORTANT INFORMATION: LIPITOR is a prescription drug. It is used in patients with multiple risk factors for heart disease such as family history, high blood pressure, age, low HDL (‘good’ cholesterol) or smoking to reduce the risk of heart attack and stroke. When diet and exercise alone are not enough, LIPITOR is used along with a low-fat diet and exercise to lower cholesterol.

Tell your doctor about all of the medicines you take. This may help avoid serious drug interactions. Your doctor should do blood tests to check your liver function before and during treatment and may adjust your dose. The most common side effects are gas, constipation, stomach pain and heartburn. They tend to be mild and often go away.

Please see additional important information on next page.

LIPITOR is not for everyone. It is not for those with liver problems. And it is not for women who are nursing, pregnant or may become pregnant. If you take LIPITOR, tell your doctor if you feel any new muscle pain or weakness. This could be a sign of rare but serious muscle side effects.

When diet and exercise are not enough, adding LIPITOR can help. LIPITOR is one of many cholesterol-lowering treatment options that you and your doctor can consider.

Could you be doing more...with Lipitor?

Ask your doctor. Call 1-888-LIPITOR (1-888-547-4867). Or find us on the web at www.lipitor.com

Free Trial Offer

Go to www.lipitor.com for more information.



Uninsured? Need help paying for medicine? Pfizer has programs that can help, no matter your age or income. You may even qualify for free Pfizer medicines. Call 1-866-706-2400. Or visit www.pfizerhelpfulanswers.com.

helpful
answers

WOMEN WATCH

Condition

ease in the Oval Office. *longer de rigueur.*



Blagojevich

babies, relaxes dress cocktail party. Cool.

comparison sinks as Ill. n. Next stop, "SNL"?

d It. gov named head of era. Good luck with that.

package passes House the Senate mess with it.

tics with \$239 mil. in '08 rebuild Ground Zero.

online megastore in your cart, Circuit City.

d thriller ODs by adding ow we're really lost.

suburban angst, or. Rest in peace, Rabbit.

COMIC FORUM

Condition

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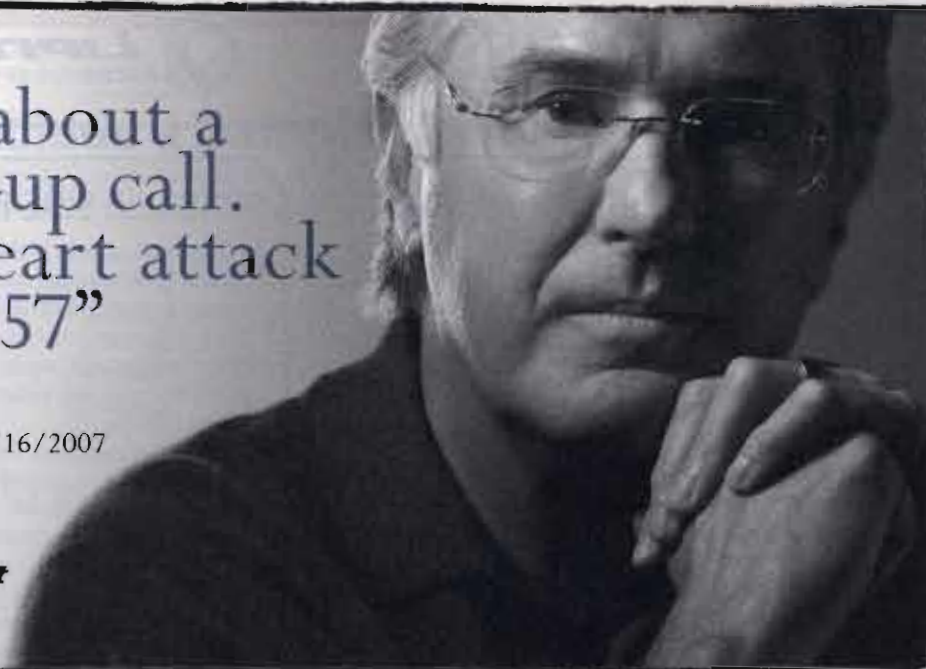
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s, plus gave out from ulla sunrise in this?

IMAGES, BRIAN SNYDER; EPONIS - BLOOMBERG; IMAGES, JIM MCISAAC

"Talk about a wake-up call. I had a heart attack at 57"

~John E. Lafayette, CA Heart attack: 8/16/2007



"I should have been doing more for my high cholesterol. I learned the hard way. Now I trust my heart to Lipitor. Talk to your doctor about your risk and about Lipitor."

- Adding Lipitor may help, when diet and exercise are not enough. Unlike some other cholesterol lowering medications, Lipitor is FDA-approved to reduce the risk of heart attack and stroke in patients with several common risk factors, including family history, high blood pressure, low good cholesterol, age and smoking.
- Lipitor has been extensively studied with over 16 years of research. And Lipitor is backed by 400 ongoing or completed clinical studies.

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LIPITOR is one of many cholesterol-lowering treatment options that you and your doctor can consider.

Please see additional important information on next page.



LIPITOR
atorvastatin calcium
tablets



Have a heart to heart with your doctor about your risk. And about Lipitor.

Call 1-888-LIPITOR (1-888-547-4867) or visit www.lipitor.com/john

You are encouraged to report negative side effects of prescription drugs to the FDA.

Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

LEGROWN DIPLOMACY The Saudi monarch with Egyptian President Hosni Mubarak (far left) at the Riyadh summit

ambassador to Washington. His brother, Foreign Minister Saud al-Faisal, met with the king last May to press Saudi concerns. "We have two nightmares," Saud told the president, according to Turki. "One is that Iran will develop a nuclear bomb, and the other is that America will take military action to prevent Iran from getting a nuclear bomb." Over the summer, however, U.S. officials started getting what seemed to be different signals. Word spread that Saudi Arabia secretly supported a much more aggressive line against Tehran and its clients: that it would undermine Iraq; encourage Israel's efforts to take over the West Bank; and perhaps even facilitate strikes on Iran's nuclear installations. But when Dick Cheney flew to Saudi Arabia over the Thanksgiving weekend to meet directly with the king, Abdullah didn't support military action. Instead, his policy has been to talk to Iran, Hizbullah and Hamas—using money, diplomacy, even reason to defuse each regional flashpoint, push for peace, and block Iran.

The biggest test so far came earlier this year when clashes erupted between Hamas and the Fatah party, threatening full-blown civil war in the Palestinian territories. "He couldn't take that," Foreign Minister al-Faisal told *NEWSWEEK*. Summoning Palestinian leaders to Mecca, Abdullah successfully pressured them to form a unity government. When the Bush administration and Israel criticized him for undermining efforts to isolate Hamas, the king was

"furious," said a source not authorized to speak on the record. But Abdullah was on a roll. He used the Arab summit to relaunch a peace initiative he first proposed five years ago. It promises full peace for Israel with all Arab states if the

Israeli state withdraws to its 1967 borders and an equitable solution is found for Palestinian refugees. Far from dismissing the idea, Israeli Prime Minister Ehud Olmert left the door open to further talks. "Saudi Arabia is the country that in the end will determine the ability of the Arabs to reach a compromise with Israel," he said. To Abdullah, who has seen so much, peace now looks like the best way to revive the beleaguered Arab world—and stifle Iran's ambitions.

With KEVIN PERAZO in Jerusalem and RICHARD WOLFE in Washington

In patients with multiple risk factors for heart disease,

Lipitor
reduces risk of
heart attack
by **36%***

If you have risk factors such as family history, high blood pressure, age, low HDL ("good" cholesterol) or smoking



DR. ROBERT JARVIK
—Inventor of the Jarvik Artificial Heart
and Lipitor User

*That means in a large clinical study, 3% of patients taking a sugar pill or placebo had a heart attack compared to 2% of patients taking Lipitor.



LIPITOR
atorvastatin calcium
tablets

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Please see additional important information on next page.

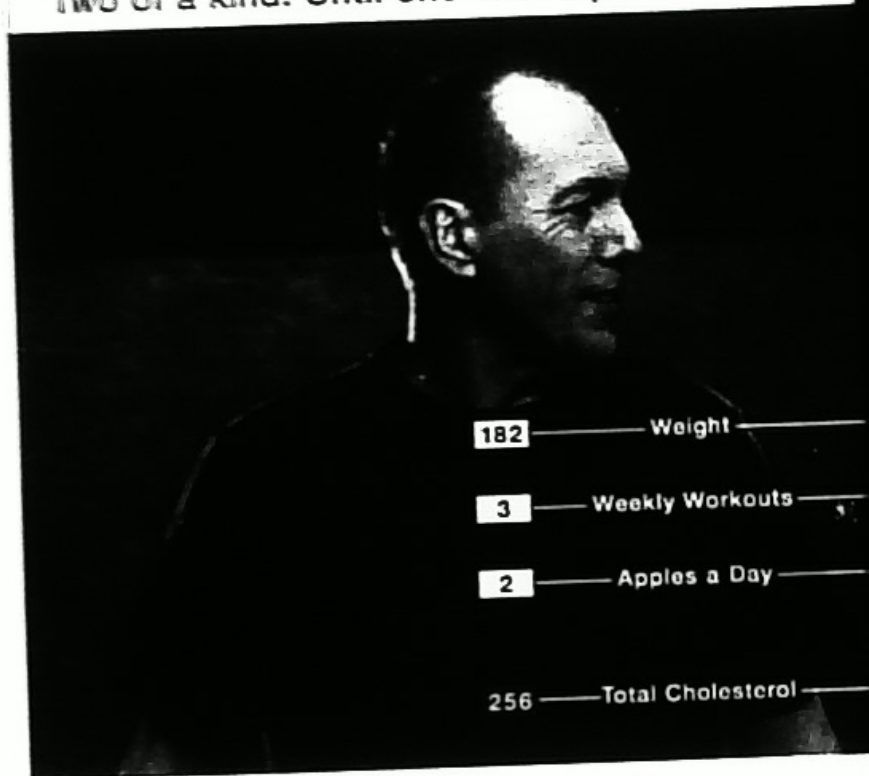
When diet and exercise alone are not enough, adding LIPITOR can help. LIPITOR is one of many cholesterol-lowering treatment options that you and your doctor can consider.

Ask your doctor. Call 1-888-LIPITOR (1-888-547-4867). Or find us on the web at www.lipitor.com

Uninsured? Need help paying for medicine? Pfizer has programs that can help, no matter your age or income. You may even qualify for free Pfizer medicines. Call 1-866-706-2400. Or visit www.pfizerhelpfulanswers.com.

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Two of a kind. Until one took Lipitor.



182 — Weight —

3 — Weekly Workouts —

2 — Apples a Day —

256 — Total Cholesterol —

Important information:

LIPITOR® (atorvastatin calcium) is a prescription drug used with diet to lower cholesterol. LIPITOR is not for everyone, including those with liver disease or possible liver problems, women who are nursing, pregnant, or may become pregnant. LIPITOR has not been shown to prevent heart disease or heart attacks.

If you take LIPITOR, tell your doctor about any unusual muscle pain or weakness. This could be a sign of serious side effects. It is important to tell your doctor about any medications you are currently taking to avoid possible serious drug interactions. Your doctor may do simple blood tests to monitor liver function before and during drug treatment. The most commonly reported side effects are gas, constipation, stomach pain and indigestion. They are usually mild and tend to go away.

Please see additional important information on next page.



182

3

2

160

Here's something that might make you think twice. Even if you do the right things, you can still have high cholesterol. In fact, for 2 out of 3 adults with high cholesterol, diet and exercise may not lower it enough. The good news is that LIPITOR can lower your total cholesterol 29% to 45%.* It can lower your bad cholesterol 39% to 60%. (*The average effect depends on the dose.) So talk to your doctor today to find out if LIPITOR is right for you. To learn more, call us at 1-888-LIPITOR or find us on the web at www.lipitor.com.



LIPITOR
atorvastatin calcium

FOR CHOLESTEROL*

Height _____

5'9"

Weight _____

125

Dress Size _____

6

Total Cholesterol _____

273

[High cholesterol doesn't
care who you are]

Important information:

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If you take LIPITOR, tell your doctor about any unusual muscle pain or weakness. This could be a sign of serious side effects. It is important to tell your doctor about any medications you are currently taking to avoid possible serious drug interactions. Your doctor may do simple blood tests to monitor liver function before and during drug treatment. The most commonly reported side effects are gas, constipation, stomach pain and indigestion. They are usually mild and tend to go away.

Please see additional important information on next page.

When it comes to high cholesterol, looks can be deceiving. Because anyone can have it, and diet and exercise may not lower it enough. The good news is adding LIPITOR can lower your total cholesterol 29% to 45% and your bad cholesterol 39% to 60% (average effect depending on dose). So stay beautiful on the inside. One in five people has high cholesterol and millions need treatment — talk to your doctor to find out if LIPITOR is right for you. To learn more, contact us at 1-888-LIPITOR or www.lipitor.com.



LIPITOR
atorvastatin calcium
TABLETS

FOR CHOLESTEROL

Family history
of high cholesterol.


Rewriting history

Important information:

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Please see additional important information on next page.

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The bad news: high cholesterol may have as much to do with family genes as food. The good news: if diet and exercise aren't enough, adding LIPITOR can lower your total cholesterol 29% to 45% and your bad cholesterol 30% to 60% (average effect depending on dose). So shake up your tree a little. One in five people has high cholesterol and millions need treatment — talk to your doctor to find out if LIPITOR is right for you. To learn more, contact us at 1-888-LIPITOR or www.lipitor.com.



LIPITOR
atorvastatin calcium

FOR CHOLESTEROL*

I See

s are coming up with
r keep their balance.

Optimism can lead to ridiculous headlines (DOGS CURE BLINDNESS!) and send us streaming to hospitals with unrealistic expectations ("I'll have the replacement piece"). But much of the optimism now stems from advances in the successful area of neural prostheses: cochlear replacement. Over the past 30 years more than 75,000 people worldwide have cochlear implants to combat severe

0 **SENSOR** Surgeons redirect the nerve that controls voice to a muscle in the neck. A nearby sensor picks up its electrical signals.

0 **VOICE SIMULATOR** Based on signals from the processor, this vibrating device produces a multitone sound which can be shaped into words by the mouth.

ing loss. Today Mass Eye and Ear's Cochlear Prostheses Research Center still is on improving cochlear implants; the next innovations involve implanting devices both of a patient's ears to enhance hearing in noisy environments and allow us to better locate the source of sounds. Dr. Liberman and his colleagues are on the cutting edge of a related problem: improving speech of people who've lost their voice. Usually, when surgeons remove the

Family history
of high cholesterol

Rewriting history



Important information:

LIPITOR® (atorvastatin calcium) is a prescription drug used with diet to lower cholesterol. LIPITOR is not for everyone, including those with liver disease or possible liver problems, women who are nursing, pregnant, or may become pregnant. LIPITOR has not been shown to prevent heart disease or heart attacks.

If you take LIPITOR, tell your doctor about any unusual muscle pain or weakness. This could be a sign of serious side effects. It is important to tell your doctor about any medications you are currently taking to avoid possible serious drug interactions. Your doctor may do simple blood tests to monitor liver function before and during drug treatment. The most commonly reported side effects are gas, constipation, stomach pain and indigestion. They are usually mild and tend to go away.

Please see additional important information on next page.

The bad news: high cholesterol may have as much to do with family genes as food. The good news: if diet and exercise aren't enough, adding LIPITOR can lower your total cholesterol 20% to 45% and your bad cholesterol 39% to 60% (average effect depending on dose). So shake up your tree a little. One in five people has high cholesterol and millions need treatment — talk to your doctor to find out if LIPITOR is right for you. To learn more, contact us at 1-888-LIPITOR or www.lipitor.com.



LIPITOR
atorvastatin calcium
tablets

FOR CHOLESTEROL*

Week

Macintosh, to future prototype cities in the fore-
-ology. Levy
-: on how this
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- mapping could
- hopping to crime-
- awesome privacy
- with it. And
- the new unwired
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- Moakley.

the terror watch.
Thomas, Daniel
man and Michael
assess the latest
alerts, and the hunt
other American
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examine evidence
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NYSE board mem-
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ff.)

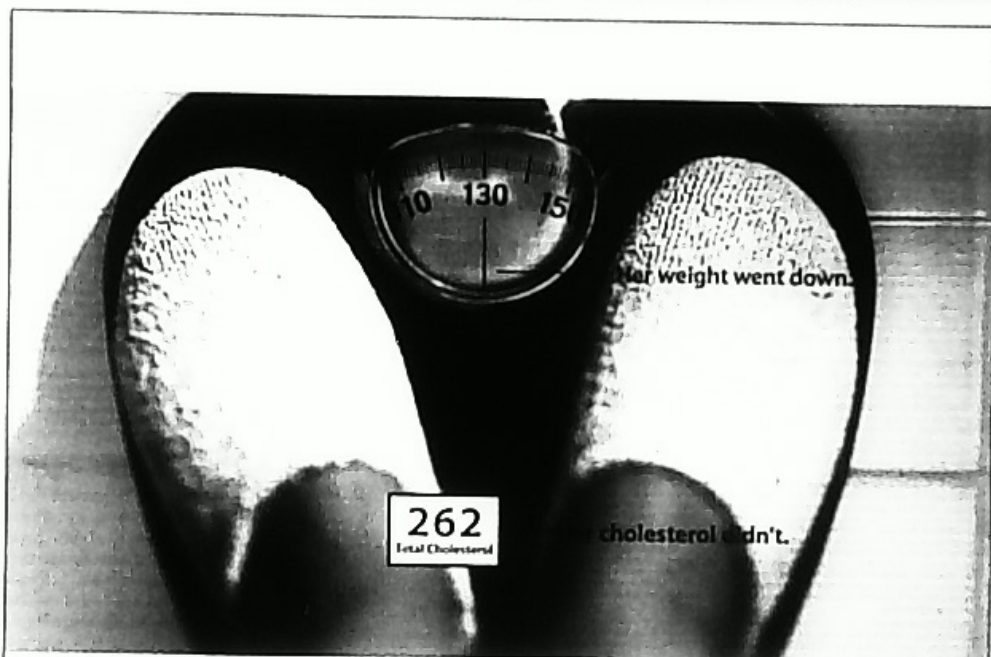
- MARK WHITAKER

Test (page 70): this
coverage of the race
? Take our survey
improved your life?

eb



For an inside look at
Washington and the
race for the White
House, read **Deanne**
CNN's Capital Letters
on Fridays.



Important information:

LIPITOR® (atorvastatin calcium) is a prescription drug. It is used with a low-fat diet to lower cholesterol.

LIPITOR is not for everyone. It is not for those with liver problems. And it is not for women who are nursing, pregnant, or may get pregnant. It has not been shown to prevent heart disease or heart attacks.

If you take LIPITOR, tell your doctor if you feel any new muscle pain or weakness. This could be a sign of serious muscle side effects. Tell your doctor about all the medicines you take. This may help avoid serious drug interactions. Your doctor should do blood tests to check your liver function before and during treatment and may adjust your dose. The most common side effects are gas, constipation, stomach pain, and heartburn. They tend to be mild and often go away.

Please see additional important information on next page.

GoRed
for women



LIPITOR
atorvastatin calcium

FOR CHOLESTEROL*

and Hold the Prions!

the re-
most
grove
from
cause
inter-
ion
but if
it has
com-

taining nerve tissue are more likely to harbor infectious material. So steer clear of brains, cheeks and cuts that are sold on the bone.

Think twice about sausage
The machine scrapings used in packaged hot dogs, bologna, salami and meatballs are drawn from numerous animals and may contain spinal tissue.

Consider buying organic
Beef bearing the USDA ORGANIC label is raised and processed under conditions that minimize the risk of infection.

Adults
of beef
d idea
short-
look for
in fish,
stables,
a work
the

risks of heart disease, diabetes and several cancers. In other words, it can bring you greater benefits than any medicine yet invented. It tastes better, too.

WILLETT and SKUPPETT are the authors of "Eat, Drink and Be Healthy," published by Simon & Schuster Source. For more information, go to health.harvard.edu/newweek.

nice



will help keep your blood sugar stable and your muscles steadily fueled. Try old-fashioned oatmeal (not instant), bananas, tomato juice, apples, low-fat yogurt or whole-wheat toast with peanut butter. Foods with high glycemic loads (white bread, fruit juice) can lead to a rapid drop in blood sugar, less energy and poorer performance.

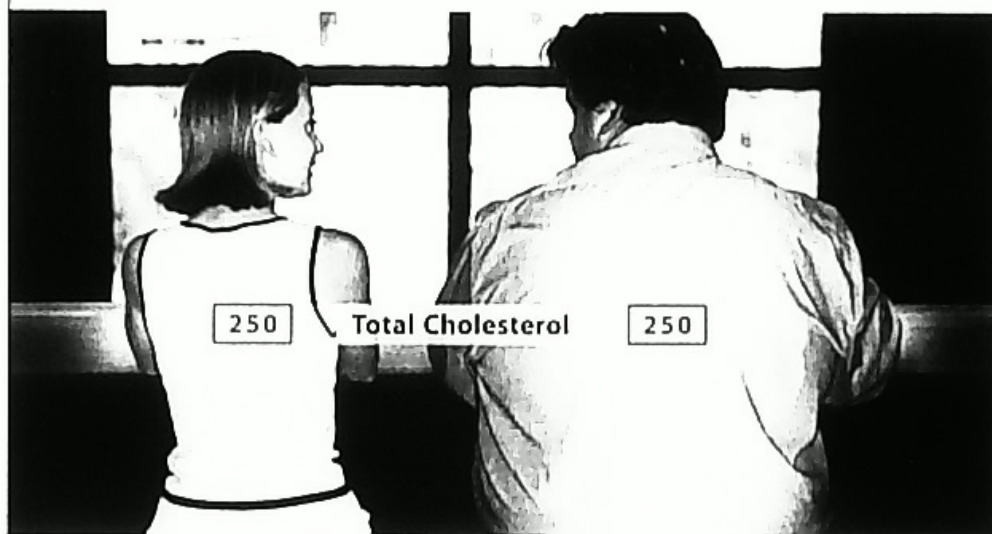
■ **During your workout:** If your exercise session will last longer than an hour, you'll need fuel along the way. Sports drinks supply carbs and electrolytes as well as replacing fluids lost through sweat. Sports gels and energy bars work, too, but be sure to drink water with them. They are very dense and may cause stomach discomfort if taken alone.

■ **After your workout:** This is when bad carbohydrates go good. Higher glycemic-load foods (in sensible portions) replenish lost stores and speed muscle recovery. A bagel or some rice cakes will not only help you recover from your workout but can help ensure a good workout the next time you lace up your sneakers.

like exercising less. workout guideline is 10% of carbohydrate of body weight (120-pound athlete a snack (fruits or carbs) over glycemic load

FERRARI is managing editor of Harvard Health Publications. For more information on exercise, go to health.harvard.edu/newweek.

High cholesterol comes in all shapes and sizes.



Here's a tip. You can be active, thin, young or old. The truth is that high cholesterol may have as much to do with your family genes as food. So, even a strict diet may not be enough to lower it. The good news is that adding LIPITOR can help. It can lower your total cholesterol 29% to 45%.¹ And it can also lower your bad cholesterol 39% to 60%.² (*The average effect depends on the dose.) More than 18 million Americans have talked to their doctor about LIPITOR. Maybe you should too. Learn more. Find out if the #1 prescribed cholesterol medicine is right for you. Call us at 1-888-LIPITOR. Find us on the web at www.lipitor.com.

 **LIPITOR.**
atorvastatin calcium
FOR CHOLESTEROL¹

Important information:

LIPITOR[®] (atorvastatin calcium) is a prescription drug used with diet to lower cholesterol. LIPITOR is not for everyone, including those with liver disease or possible liver problems, women who are nursing, pregnant, or may become pregnant. LIPITOR has not been shown to prevent heart disease or heart attacks.

If you take LIPITOR, tell your doctor about any unusual muscle pain or weakness. This could be a sign of serious side effects. It is important to tell your doctor about any medications you are currently taking to avoid possible serious drug interactions. Your doctor may do simple blood tests to monitor liver function before and during drug treatment. The most commonly reported side effects are gas, constipation, stomach pain and indigestion. They are usually mild and tend to go away.

Please see additional important information on next page.



Taking care of my cholesterol has become an important part of my game plan.

-Head Coach Dan Reeves

When I first learned my cholesterol was high, I was shocked. I had always been healthy and active, and I didn't want to take medication. But my doctor told me that if I didn't take care of my cholesterol, I could have a heart attack or stroke. So I started taking ZOCOR.

ZOCOR is an effective medicine that along with diet and exercise can significantly lower total cholesterol. A clinical study showed that ZOCOR lowered total cholesterol and heart disease risk by 42% over 6 weeks. So, if you're looking for a way to take control of your cholesterol and heart disease risk, ZOCOR may be the answer.

Important considerations: ZOCOR is a prescription medicine and is not for everyone, including women who are nursing or pregnant or who may become pregnant, anyone with liver problems, and people who are taking certain other medicines. One of the ingredients of ZOCOR, Unexplained muscle pain or weakness, which is a rare but serious side effect and should be reported to your doctor. Your doctor may do blood tests before and during treatment with ZOCOR to check for liver problems. It may cause other side effects, including dizziness, headache or food you should avoid while on ZOCOR (see important information following this ad).

When diet and exercise are not enough, ask your doctor if ZOCOR is right for you. For more information call 1-800-MERCK-75 or visit zocor.com.

ZOCOR
SIMVASTATIN



ZOCOR
SIMVASTATIN

Drug Interactions: Because of possible serious drug interactions, it is important to tell your doctor and other drug you are taking, including those already listed, a prescription.

SPECIAL ADVERTISING SECTION

HEART

During conventional bypass operations, a patient's heart may be stopped and a heart-lung machine used to divert blood around the heart, supply it with

UMI



security guard in Harry's, a physical therapist's market (also in Atlanta), and Jewish dentist by vaccination will even be complete. "I hope will never forget my name," he told *Newsweek* two months ago. "It will never end."
• **BOB BIRNIE**
FOR *NEWSWEEK* IN ATLANTA

102

Three's a crowd. **Tuesday**

VOL

46

ISS

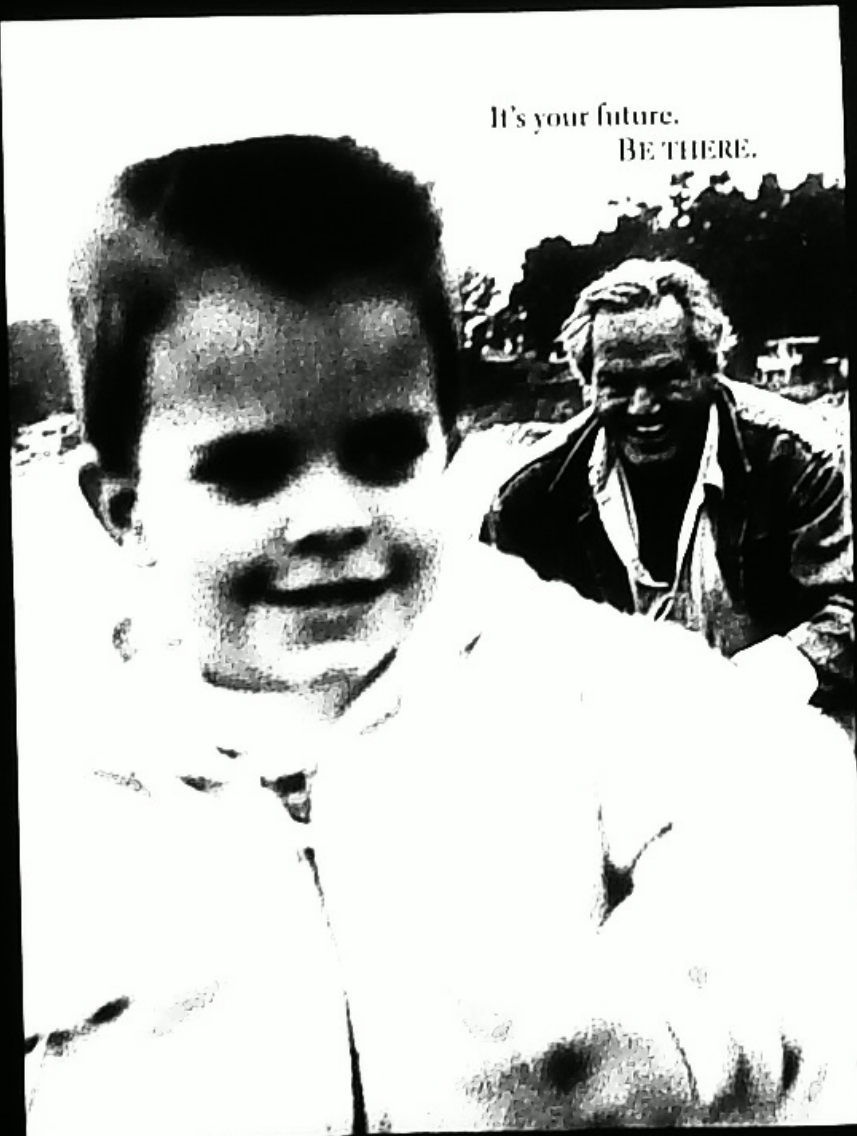
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NO

11

1996

UMI



It's your future.
BE THERE.

Your future is so valuable, it's worth taking with **high cholesterol**. If you do something now, you may improve your chances of being there to play your part.

High cholesterol can lead to heart disease and death. If you've been trying to lower your cholesterol with diet and exercise, and still haven't reached your goal, ask your doctor about adding ZOCOR.

More than 11 million people around the world have taken ZOCOR. It works by reducing potentially dangerous levels of LDL (bad) cholesterol in the bloodstream. Results can vary, but ZOCOR is the only medicine that's actually been proven to help ease the lives of people with high cholesterol and heart disease.

Landmark five-year study among heart disease patients with high cholesterol demonstrated dramatic results for ZOCOR: fewer cardiac procedures, fewer heart attacks, and 42% fewer deaths from heart disease.

ZOCOR is a prescription medication and only your doctor or health care professional can determine whether you should take it. In clinical studies, liver abnormalities were experienced by 1% of patients. Some people should not take ZOCOR: people with active liver disease or possible liver problems, women who are pregnant, likely to become pregnant, or are breast feeding, or people who are allergic to any of its ingredients.

When you talk to your doctor about ZOCOR, be sure to mention any medications you are taking, to avoid possible serious drug interactions. Be sure to tell your doctor if you experience any unexplained muscle pain or weakness while taking ZOCOR, since this could be a sign of serious side effects. Finally, discuss any other side effects with your doctor.

To get your free copy of *Surviving High Cholesterol*, call 1-800-261-8176. Visit our Website at <http://www.zocor.com>

Please read the next page for a summary of prescribing information and discuss it with your doctor.



Ask your doctor about ZOCOR—the only cholesterol medicine proven to help save lives among people with high cholesterol and heart disease.

- Does my high cholesterol put me at risk?
- Should I consider adding ZOCOR to my diet and exercise plan?
- Could ZOCOR reduce my chances of having a heart attack?
- What are the side effects of ZOCOR?
- What type of results can I expect from ZOCOR?

ZOCOR is indicated in addition to diet for patients with high cholesterol when diet and exercise are inadequate.

ZOCOR. The cholesterol medicine that helps save lives. **MERCK**

It's your future.
BE THERE.

Your future is too valuable a thing to risk with **high cholesterol**. If you do something now, you may improve your chances of being there to play your part.

High cholesterol can lead to heart disease (and death). If you've been trying to lower your cholesterol with diet and exercise and still haven't reached your goal, ask your doctor about adding ZOCOR.

More than 31 million people around the world have taken ZOCOR. It works by reducing potentially dangerous levels of LDL (bad) cholesterol in the bloodstream. Results can vary, but ZOCOR is the only medicine that's actually been proven to help save the lives of people with high cholesterol and heart disease.

A landmark five-year study among heart disease patients with high cholesterol demonstrated dramatic results for ZOCOR: fewer cardiac procedures, fewer heart attacks, and 42% fewer deaths from heart disease.

ZOCOR is a prescription medication and only your doctor or health care professional can determine whether you should take it. In clinical studies, liver abnormalities were experienced by 1% of patients. Some people should not take ZOCOR: people with active liver disease or possible liver problems, women who are pregnant, likely to become pregnant, or are breast-feeding, or people who are allergic to any of its ingredients.

ZOCOR is indicated as an addition to diet for patients with high cholesterol when diet and exercise are inadequate.

ZOCOR. The cholesterol medicine that helps save lives.  MERCK

When you talk to your doctor about ZOCOR, be sure to mention any medications you are taking, to avoid possible serious drug interactions. Be sure to tell your doctor if you experience any unexplained muscle pain or weakness while taking ZOCOR, since this could be a sign of serious side effects. Finally, discuss any other side effects with your doctor.

To get your free copy of "Surviving High Cholesterol," call 1-800-264-9559. Visit our Web site at <http://www.zocor.com>

Please read the next page for a summary of prescribing information and discuss it with your doctor.

Ask your doctor about ZOCOR—the only cholesterol medicine proven to help save lives among people with high cholesterol and heart disease.

- Does my high cholesterol put me at risk?
- Should I consider adding ZOCOR to my diet and exercise plan?
- Could ZOCOR reduce my chances of having a heart attack?
- What are the side effects of ZOCOR?
- What type of results can I expect from ZOCOR?

ZOCOR
SIMVASTATIN



What

Mike Vaughn did with his future.

Your future is too valuable a thing to risk with high cholesterol. High cholesterol can lead to heart disease and even death. When used with diet and exercise, ZOCOR is the one medicine that's actually been proven to help save the lives of people with high cholesterol and heart disease. More than 3.1 million people have taken ZOCOR, the most often prescribed cholesterol medicine in the U.S.*

A landmark five-year study among heart disease patients with high cholesterol demonstrated dramatic results for ZOCOR: fewer cardiac procedures, fewer heart attacks, and 42% fewer deaths from heart disease.

ZOCOR is a prescription drug, so you should ask your doctor or health-care professional if ZOCOR is right for you. Some people should not take ZOCOR: people with active liver disease or possible liver problems; women who are pregnant, likely to become pregnant, or are nursing; or people who are allergic to any of its ingredients.

Your doctor may perform blood tests to check your liver function before and during treatment with ZOCOR. Be sure to tell your doctor if you experience any unexplained muscle pain or weakness while taking ZOCOR, since this could be a sign of serious side effects, and be sure to mention any medication you are taking to avoid possible serious drug interactions.

To get your free copy of "Surviving High Cholesterol," call 1-800-671-7037. Visit our Web site at <http://www.zocor.com>



Please read the next page for a summary of Prescribing Information and discuss it with your doctor.

ZOCOR is indicated as an addition to diet for patients with high cholesterol when diet and exercise are inadequate. (Results vary patient to patient.)

It's your future.
BE THERE.

ZOCOR. The cholesterol medicine that helps save lives.

*Source: IMS America, December 1995-July 1997

ZOCOR
SINUVASTATIN

Where will you be
when your wedding dress walks
down the aisle a second time?



If you have high cholesterol and heart disease,
talk to your doctor about ZOCOR.

The cholesterol medicine that HELPS SAVE LIVES.

Life is filled with moments you don't want to miss. By reducing the risk of a heart attack, ZOCOR can help ensure that you'll be there to enjoy them.

When diet and exercise are not enough, talk to your doctor about adding ZOCOR. In a landmark five-year study among heart disease patients with high cholesterol, ZOCOR demonstrated impressive results: fewer heart attacks, fewer strokes or mini-strokes, and 42% fewer deaths from heart disease.

In addition, ZOCOR has been proven to dramatically reduce LDL ("bad") cholesterol while increasing HDL ("good") cholesterol.

Important considerations: ZOCOR is a prescription medication, so you should ask your doctor or healthcare professional

if ZOCOR is right for you. ZOCOR isn't for everyone, including women who are pregnant or nursing or who may become pregnant, people who are allergic to any of its ingredients, or anyone with liver disease. Unexplained muscle pain or weakness could be a sign of a rare but serious side effect, and should be reported to your doctor right away. Your doctor may do simple blood tests before and during treatment with ZOCOR to check for liver problems. Be sure your doctor knows about other medications you may be taking in order to avoid any possible serious drug interactions.

To get your free copy of "The Guide to Surviving High Cholesterol," call 1-800-214-7017. Visit our website at www.zocor.com.

Please read the next page for additional information about ZOCOR.

It's your future. Be there.



**How will you take care of your
high cholesterol and heart disease?**

ZOCOR is an effective medicine that along with diet and exercise can significantly lower total cholesterol.

Important considerations:

Ask your doctor if ZOCOR is right for you. For more information call 1-800-787-0083 or visit www.zocor.com.



It's your future. Be there.

ZOCOR[®]

SIMVASTATIN

PLEASE READ THE SUMMARY CAREFULLY, AND THEN ASK YOUR DOCTOR ABOUT ZOCOR. NO ADVERTISEMENT CAN PROVIDE ALL THE INFORMATION NEEDED TO PRESCRIBE A DRUG. THE ADVERTISEMENT DOES NOT TAKE THE PLACE OF CAREFUL DISCUSSION WITH YOUR DOCTOR. ONLY YOUR DOCTOR HAS THE TRAINING TO WEIGH THE RISKS AND BENEFITS OF A PRESCRIPTION DRUG FOR YOU.

USES OF ZOCOR

ZOCOR (simvastatin) can be used to reduce the risk of heart disease in patients who had a previous heart attack or stroke, or who have a high risk of developing heart disease. ZOCOR can also be used to reduce the risk of developing heart disease in patients who have a high risk of developing heart disease. ZOCOR can also be used to reduce the risk of developing heart disease in patients who have a high risk of developing heart disease. ZOCOR can also be used to reduce the risk of developing heart disease in patients who have a high risk of developing heart disease.

WHEN ZOCOR SHOULD NOT BE USED

ZOCOR should not be used in patients who are allergic to any of its ingredients. It should not be used in patients who are taking certain other drugs, such as cyclosporine, gemfibrozil, niacin, erythromycin, clarithromycin, HIV protease inhibitors, and certain antifungal drugs.

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protease inhibitors, the antidepressant nefazodone, and the calcium channel blocker verapamil. Interruption of therapy with ZOCOR[®] (simvastatin) should be considered if you are going to take an acute antifungal medication, such as itraconazole, or macrolide antibiotics, such as erythromycin. Avoid drinking large quantities of grapefruit juice (more than one quart daily) while on ZOCOR. The risk of muscle breakdown is greater in patients with kidney problems or diabetes.

Because there are risks in combining therapy with ZOCOR with the products listed above, your doctor should carefully weigh the potential benefits and risks. He or she should also carefully monitor patients for any muscle pain, tenderness, or weakness, particularly during the initial months of therapy and if the dose of either drug is increased. Your doctor also may monitor the level of certain muscle enzymes in your body, but there is no assurance that such monitoring will prevent the occurrence of severe muscle disease.

If you have conditions that can increase your risk of muscle breakdowns, which in turn can cause kidney damage, your doctor should temporarily withhold or stop ZOCOR. Also, since there are no known adverse consequences of briefly stopping therapy with ZOCOR, treatment should be stopped a few days before elective major surgery and when any major acute medical or surgical condition occurs. Discuss this with your doctor, who can explain these conditions to you.

Liver: About 1% of patients who took ZOCOR in clinical trials developed elevated levels of some liver enzymes. Patients who had these increases usually had no symptoms. Elevated liver enzymes usually returned to normal levels when therapy with ZOCOR was stopped.

In the ZOCOR Survival Study, the number of patients with more than one liver enzyme level elevation to greater than 3 times the normal upper limit was no different between the ZOCOR and placebo groups. Only 8 patients on ZOCOR and 5 on placebo discontinued therapy due to elevated liver enzyme levels. Patients were started on 20 mg of ZOCOR, and one third had their dose raised to 40 mg.

Your doctor should perform routine blood tests to check these enzymes before you start treatment with ZOCOR and periodically thereafter (for example, semiannually) for your first year of treatment or until 1 year after your last elevation in dose. Patients titrated to the 80-mg dose should receive an additional test at 3 months. If your enzyme levels increase, your doctor should order more frequent tests. If your liver enzyme levels remain unusually high, your doctor should discontinue your medication.

Tell your doctor about any liver disease you may have had in the past and about how much alcohol you consume. ZOCOR should be used with caution in patients who consume large amounts of alcohol.

PRECAUTIONS

Before starting treatment with ZOCOR, try to lower your cholesterol by other methods such as diet, exercise, and weight loss. Ask your doctor about how best to do this. Any other medical problems that can cause high cholesterol should also be treated.

Drug Interactions: Because of possible serious drug interactions, it is important to tell your doctor what other drugs you are taking, including those obtained without a prescription.

ZOCOR[®] (simvastatin) can interact with cyclosporine (Sandimmune), itraconazole, ketoconazole, gemfibrozil, niacin, erythromycin, clarithromycin, HIV protease inhibitors, nefazodone, and verapamil.

To avoid possible serious side effects, avoid drinking large quantities of grapefruit juice (more than one quart daily) while on ZOCOR. (See WARNINGS, Muscle.)

Some patients taking lipid-lowering agents similar to ZOCOR and coumarin anti-coagulants (a type of blood thinner) have experienced bleeding and/or increased blood clotting time. Patients taking these medicines should have their blood tested before starting therapy with ZOCOR and should continue to be monitored.

Central Nervous System Toxicity; Cancer, Mutations, Impairment of Fertility: Like most prescription drugs, ZOCOR was required to be tested on animals before it was marketed for human use. Often these tests were designed to achieve higher drug concentrations than humans achieve at recommended dosing. In some tests, the animals had damage to the nerves in the central nervous system. In studies of mice with high doses of ZOCOR, the likelihood of certain types of cancerous tumors increased. No evidence of mutations of or damage to genetic material has been seen. In one study with ZOCOR, there was decreased fertility in male rats.

Pregnancy: Pregnant women should not take ZOCOR because it may harm the fetus.

Safety in pregnancy has not been established. In studies with lipid-lowering agents similar to ZOCOR, there have been rare reports of birth defects of the skeleton and digestive system. Therefore, women of childbearing age should not take ZOCOR unless it is highly unlikely they will become pregnant. If a woman does become pregnant while taking ZOCOR, she should stop taking the drug and talk to her doctor at once. The active ingredient of ZOCOR did not cause birth defects in rats at 3 times the human dose or in rabbits at 3 times the human dose.

Nursing Mothers: Drugs taken by nursing mothers may be present in their breast milk. Because of the potential for serious adverse reactions in nursing infants, a woman taking ZOCOR should not breast feed. (See WHEN ZOCOR SHOULD NOT BE USED.)

Pediatric Use: ZOCOR is not recommended for children or patients under 20 years of age.

SIDE EFFECTS

Most patients tolerate treatment with ZOCOR well, however, like all prescription drugs, ZOCOR can cause side effects, and some of them can be serious. Side effects that do occur are usually mild and short-lived. Only your doctor can weigh the risks versus the benefits of any prescription drug. In clinical studies with ZOCOR, less than 1.5% of patients dropped out of the studies because of side effects. In a large, long-term study, patients taking ZOCOR experienced similar side effects to those patients taking placebo (sugar pills). Some of the side effects that have been reported with ZOCOR or related drugs are listed below. This list is not complete. Be sure to ask your doctor about side effects before taking ZOCOR and to discuss any side effects that occur.

Digestive System: Constipation, diarrhea, upset stomach, gas, heartburn, stomach pain/cramps, anorexia, loss of appetite, nausea, inflammation of the pancreas, hepatitis, jaundice, fatty changes in the liver, and, rarely, severe liver damage and failure, cirrhosis, and liver cancer.

Muscle, Skeletal: Muscle cramps, aches, pain, and weakness, joint pain, muscle breakdown.

Nervous System: Dizziness, headache, insomnia, tingling, memory loss, damage to nerves causing weakness and/or loss of sensation and/or abnormal sensations, anxiety, depression, tremor, loss of balance, psychic disturbances.

Skin: Rash, itching, hair loss, dryness, nodules, discoloration.

Eye/Senses: Blurred vision, altered taste sensation, progression of cataracts, eye muscle weakness.

Hypersensitivity (Allergic) Reactions: On rare occasions, a wide variety of symptoms have been reported to occur either alone or together in groups (referred to as a syndrome) that appeared to be based on allergic-type reactions, which may rarely be fatal. These have included one or more of the following: a severe generalized reaction that may include shortness of breath, wheezing, digestive symptoms, and low blood pressure and even shock; an allergic reaction with swelling of the face, lips, tongue and/or throat with difficulty swallowing or breathing; symptoms mimicking lupus (a disorder in which a person's immune system may attack parts of his or her own body); severe muscle and blood vessel inflammation, sometimes including rash, bruises, various disorders of blood cells (that could result in anemia, infection, or blood clotting problems) or abnormal blood tests; inflamed or painful joints, fever, fatigue and weakness; sensitivity to sunlight, fever, chills, flushing, difficulty breathing, and severe skin disorders that vary from rash to a serious burn-like shedding of skin all over the body, including mucous membranes such as the lining of the mouth.

Other: Loss of sexual desire, breast enlargement, impotence.

Laboratory Tests: Liver function test abnormalities including elevated alkaline phosphatase and bilirubin, thyroid function abnormalities.

NOTE: This summary provides important information about ZOCOR[®] (simvastatin). If you would like more information, ask your doctor or pharmacist to let you read the complete prescribing information and then discuss it with them.



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It's your future.
BE THERE.



Your future is too valuable a thing to risk with **high cholesterol**. If you do something now, you may improve your chances of being there to play your part.

High cholesterol can lead to heart disease (and death). If you've been trying to lower your cholesterol with diet and exercise and still haven't reached your goal, ask your doctor about adding ZOCOR.

More than 11 million people around the world have taken ZOCOR. It works by reducing potentially dangerous levels of LDL (bad) cholesterol in the bloodstream. Results can vary, but ZOCOR is the only medicine that's actually been proven to help save the lives of people with high cholesterol and heart disease.

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ZOCOR is a prescription medication and only your doctor or health care professional can determine whether you should take it. In clinical studies, liver abnormalities were experienced by 1% of patients. Some people should not take ZOCOR—people with active liver disease or possible liver problems, women who are pregnant, likely to become pregnant, or are breast-feeding, or people who are allergic to any of its ingredients.

When you talk to your doctor about ZOCOR, be sure to mention any medications you are taking to avoid possible serious drug interactions. Be sure to tell your doctor if you experience any unexplained muscle pain or weakness while taking ZOCOR, since this could be a sign of serious side effects. Finally, discuss any other side effects with your doctor.

To get your free copy of "Saving High Cholesterol," call 1-800-787-5571. Visit our Web site at <http://www.zocor.com>.

Please read the next page for a summary of prescribing information and discuss it with your doctor.



Ask your doctor about ZOCOR—the only cholesterol medicine proven to help save lives among people with high cholesterol and heart disease.

- Does my high cholesterol put me at risk?
- Should I consider adding ZOCOR to my diet and exercise plan?
- Could ZOCOR reduce my chances of having a heart attack?
- What are the side effects of ZOCOR?
- What type of results can I expect from ZOCOR?

ZOCOR is indicated in an addition to diet for patients with high cholesterol when diet and exercise are inadequate.

ZOCOR. The cholesterol medicine that helps save lives.  MERCK

ZOCOR

ask your doctor to ensure your blood cholesterol levels, with a lipid panel (see insert), are under control. ZOCOR (simvastatin) and its active ingredients may interact with other medications. Tell your doctor if you are taking any other medications, including over-the-counter drugs, herbs, or supplements. Tell your doctor if you are pregnant, planning to become pregnant, or breastfeeding. Tell your doctor if you are allergic to any of the ingredients in ZOCOR. See important information about ZOCOR on the inside of the box.

P R E S S

...ing a story about public health and

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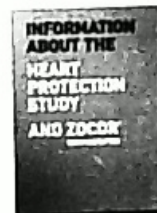
4-MILE HIKE

If you have diabetes, you probably think if you're managing your blood sugar, you're managing all your health risks. Unfortunately, managing your blood sugar may not be enough to help protect your heart. The National Institutes of Health (NIH) states that middle-aged people with type 2 diabetes have the same high risk of having a heart attack as people without diabetes who already have had a heart attack.

The Heart Protection Study by Oxford University, funded in part by Merck, researched ZOCOR. ZOCOR is the first and only cholesterol medication proven to significantly reduce the risk of heart attack and stroke in people with diabetes. Regardless of cholesterol level.

Before the Heart Protection Study was complete, over 160 million prescriptions for ZOCOR had been filled to lower cholesterol.

YOU MANAGE YOUR BLOOD SUGAR. WHAT ARE YOU DOING TO HELP PROTECT YOUR HEART?



If you have diabetes, ask your doctor how ZOCOR, along with a healthy diet, can help protect you. Get information about the Heart Protection Study and ZOCOR at zocor.com or call 1-800-MERCK-75.



Important considerations: ZOCOR is a prescription medicine and isn't right for everyone, including women who are nursing or pregnant or who may become pregnant, anyone with liver problems, and people who are allergic to any ingredients of ZOCOR. Unexplained muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. Your doctor may do blood tests before and during treatment with ZOCOR to check for liver problems. To avoid serious side effects, discuss with your doctor medicine or food you should avoid while on ZOCOR.

YOUR RESULTS MAY VARY.

ASK YOUR DOCTOR IF ZOCOR IS RIGHT FOR YOU.
PLEASE READ THE MORE DETAILED INFORMATION ABOUT ZOCOR
IMMEDIATELY FOLLOWING THIS AD.

ZOCOR. It's your future. Be there.



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To find out if you qualify, call 1-800-MERCK-75



SCRAMBLE

Survivors in Banda Aceh, Indonesia, reach for their share of food and water.

TSUNAMI

AFTER THE FLOOD

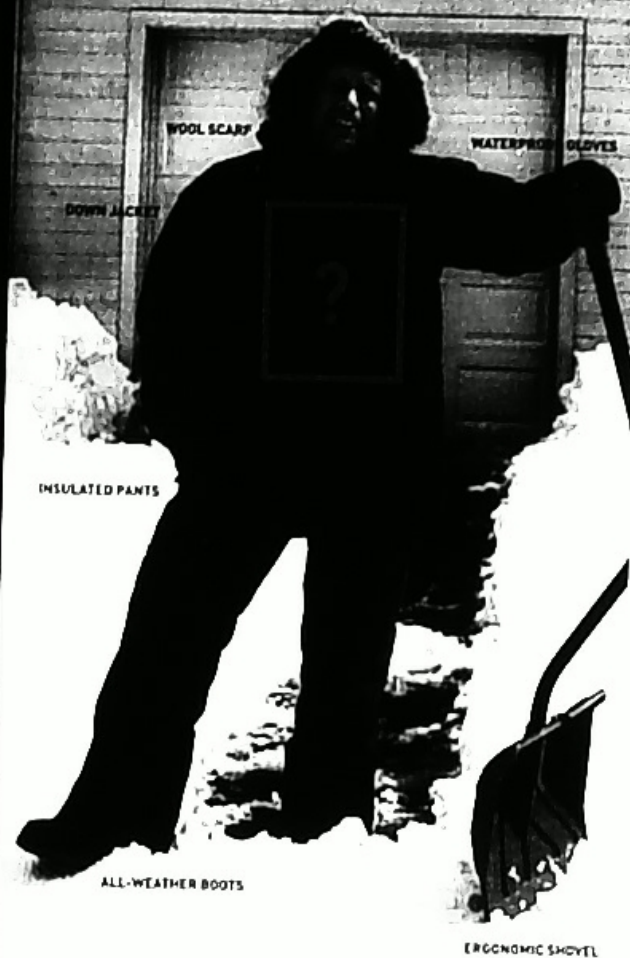
With disease looming, the world launches a massive relief effort. Will the aid reach the victims in time? By Bill Powell

THE SMALL VILLAGE OF VELANKANNI, ON THE SOUTHEASTERN coast of India, is thought to be a holy place. It draws Christian pilgrims to a Roman Catholic basilica there, as well as Muslims and Hindus seeking blessings and good fortune. In Velankanni, Christians, Muslims and Hindus together prayed for their dead last week—and all the while struggled desperately to save the living. In the wake of the tsunami, at least 75,000 people, half the population of the area affected, have crowded into hastily built refugee camps that became instant incubators for disease. Critical supplies—medicine, potable water, disinfectant—are sorely lacking. In one camp set up in a Hindu temple, 2,500 people are sleeping and eating next to their own excrement. Four days after the tsunami hit, some 4,000 people in Velankanni were already being treated for vomiting and diarrhea, according to the head of a local health charity. Relief workers fear an

imminent outbreak of cholera, gastroenteritis and hepatitis B. "The situation is very, very serious," says Dr. V. Rajani, director of the Garudaqam Global Foundation, an Indian health nongovernmental organization (NGO). "The government has to start moving to the villages [instead of] expecting people to come to them."

For the entire world—governments, large firms, private charities and individuals—moved to contribute to the massive relief efforts under way—getting to the villages is now the order of the day. In the first week after the tsunami, governments around the world pledged \$2 billion in assistance to the devastated region, though in reality no one knows what the total cost of relief will be in the end. While the Bush Administration took first for initially pledging only \$15 million—a sum that has since increased to \$150 million—private charities and relief agencies say they are stunned by the level of contributions from individual donors. During the first week of the crisis, the American Red Cross received more than \$9 million in donations made through a single website, Amazon.com. Oxfam has raised at least \$25 million worldwide and said it may be on track to collect more than it did in the wake of the

Every day you protect yourself.



Are you doing enough to help protect your heart?

- Heart disease is the leading cause of death in the United States.
- If you've had a heart attack or stroke, talk to your doctor about how ZOCOR, along with a healthy diet, can help protect your heart.

The Heart Protection Study proved that ZOCOR, along with diet, significantly reduced the risk of heart attack and stroke in people with heart disease who had high or even normal cholesterol.

YOUR RESULTS MAY VARY

- Get your free copy of your Heart Matters at zocor.com or call 1-800-MERCK-75.

Important considerations: ZOCOR is a prescription tablet and isn't right for everyone, including women who are nursing or pregnant or who may become pregnant, and anyone with liver problems. Unexplained muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. ZOCOR may interact with other medicines or certain foods, increasing your risk of getting this serious side effect. So tell your doctor about any other medications you are taking.

ASK YOUR DOCTOR IF ZOCOR IS RIGHT FOR YOU. PLEASE READ THE MORE DETAILED INFORMATION ABOUT ZOCOR IMMEDIATELY FOLLOWING THIS AD.

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Nuala O'Faolain

Chasing the Evanescent Glow

Happiness is not cozy. It gleams most vividly against a background of black.

WHEN I THINK ABOUT HAPPINESS, IT IS NOT AN IDEAL I see, though I know the ad that shows perfectly matched children hugging their toes in an impecable couple strutting on the beach at an exclusive resort or a silver-haired pair holding hands beside a golf cart. My happiness comes. Where I live in the west of Ireland, often in the evening a band of golden light beams along the horizon of the ocean. Thin, small clouds, rugged and wistful, drift across the radiance and obscure it and thicken, and that is how the dusk comes. There is nothing I can do to make the gold arrive, and of its nature it disappears. After dusk departs, the dark is not just dark. It contains the memory of what it was. And that is what I think happiness is like: radiant like the last of the sun, but always in the process of disappearing.

In the afterglow I roam across the grass to the shed to fill my basket with sticks of turf for the fire. The dog throws herself in front of me, quivering at the amazing possibility that we're going for a walk—out one dog molecule of desperation kept back to protect herself with. She lives entirely in the present moment. But happiness is conscious of the before and after: it is the brimming water in the bowl of a fountain that the slightest disturbance will spill. On my way to sleep I'd remember with satisfaction how high the turf was piled. If a rain shower spinning in from the ocean rattles the window, I'd feel how warm I am, and safe. I'd count the abundance of bird and

bird and hilled loaves within my sturdy walls, and even though I'm on my own and my body is lonely—in the mid-happy people are never alone—there are times when satisfaction grows to a state that is like a dense calm. The minute dot that is myself will be in balance for a while with the great universe.

This happiness was born back when I was small. It is the payback for years of want. If I had always had enough, what would it mean to me to have enough now?

Some pattern of light and shade was laid down, once upon a time, in that place that is both heart and mind where the state of happiness harks, and the pattern comes with each person on

Nuala O'Faolain, author of *Are You Somebody?*, is writing a book about an Irish American newspaper called *Chicago Mary*.

the crooked path out of the past and in part of their unique being. And therefore what makes us happy can divide us from each other. Through the myth world that it creates, a child who has found completion in looking out the eyes of a pattern across the head of their newborn child, but the pattern wants to sing an aria as perfectly as it can be sung. Another person exhausted with pleasure, prolongs a brides and grateful kiss to a lover, the lover is restlessly waiting to be released to check the stock market. Even the classic happy experience, the letter that says the job is yours, the first moment pausing the cross, an

empty mailbox, a candidate elevated, a horse storming home to win by a neck at 10-1, have something solitary at their core. The witness pretends that happiness is a park, age the letter to sell it, but there is no warm shared faith, not there. Happiness is not cozy. It gleams most vividly against a background of black.

Because needs can vary, even if up, needs can say that it will never come again. But needs can stop it from disappearing either. From one window at the next my rich balcony alone, downer than streams down the window, I look up at the ceiling, my eyes exploring the dark. Is being happy like a current that disturbs the water? I was floating, and then strands swam up from underneath, and the current and regret. The old man started crying again. Why am I not loved?

The waiting for the next time begins.

My great-grandfather told how during the Great Famine, when everyone around his part of the country was starving, a crow flew past with a potato in its beak, which meant it was a good potato, not diseased, and many women and children set off after the crow, stambling over ditches, falling, eating each other to be the one to get the food if the bird dropped it. That is what the pursuit of happiness is like. This is one of life's mysteries: there is no coming to terms with that as long as we have breath, we have no choice but to go running after happiness, our poor faces strained upward as if we cannot get enough of it, as if happy is what we were meant to be, as if without happiness we would starve.

As we would.



Every day you protect yourself. Are you doing enough to help protect your heart?

• Heart disease is the #1 cause of death in women.

• If you've had a heart attack, or stroke, talk to your doctor about how ZOCOR, along with a healthy diet, can help protect your heart.

The Heart Estrogen study proved that ZOCOR, along with diet, significantly reduced the risk of heart attack and stroke in men and women with heart disease who had high or even normal cholesterol.

YOUR RESULTS MAY VARY

• Get your free copy of *Four Heart Matters* at www.zocor.com or call 1-800-MERCK-24

Important considerations: ZOCOR is a prescription tablet and isn't right for everyone, including women who are nursing or pregnant. It may become pregnant and anyone with liver problems, unexplained muscle pain or weakness could be a sign of stroke but serious side effect and should be reported to your doctor right away. ZOCOR may interact with other medicines, or certain foods, increasing your risk of getting this serious side effect. So tell your doctor about any other medications you are taking.

ASK YOUR DOCTOR IF ZOCOR IS RIGHT FOR YOU. PLEASE READ THE MORE DETAILED INFORMATION ABOUT ZOCOR IMMEDIATELY FOLLOWING THIS AD.

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LIVALO[®]

IT'S YOUR FUTURE. BE THERE.

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"I eat right and exercise to control my high cholesterol.

Why should I worry about a first heart attack?"



Diet and exercise may not be enough.

Pravachol reduces the risk of a first heart attack up to one-third.

Talk to your doctor about Pravachol. Lots of medications can lower cholesterol, but with Pravachol there's more. It is the only cholesterol-lowering drug of its kind proven to help prevent first heart attacks. Improving your diet and exercise is an important first step, but may not be enough. So ask your doctor about adding Pravachol to your diet and exercise regimen. In clinical studies, Pravachol has been taken by more people over a longer period of time than any other medication of its kind. Along with diet and exercise, Pravachol has been prescribed for millions of men and women. Pravachol. It could help you live a longer, healthier life.

Pravachol, in combination with diet and exercise, is proven to reduce the risk of a first heart attack, reduce the risk of death from heart disease and the need for heart surgery (such as bypass or angioplasty) based on a landmark study including over 6,500 males with high cholesterol and no evidence of heart disease. Because Pravachol is a prescription drug, you should ask your doctor or healthcare professional if Pravachol is right for you. As with most medications,

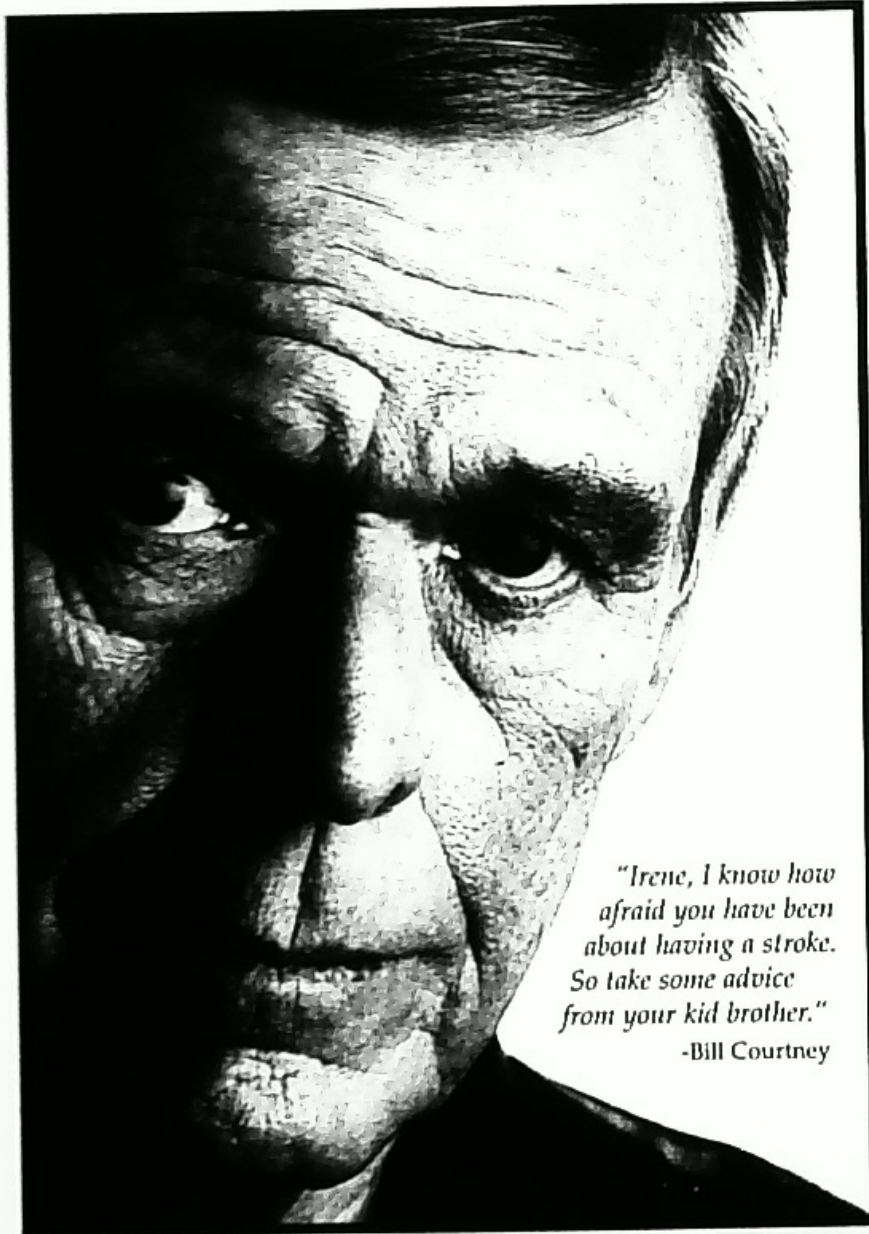
Pravachol isn't for everyone, including women who are pregnant or nursing, or may become pregnant, people who are allergic to any of its ingredients or by anyone with liver disease. Your doctor may do simple blood tests to check your liver function before and during treatment with Pravachol. Some mild side effects, such as slight rash or stomach upset, occur in about 2-4% of patients. Muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. Be sure your doctor knows about other medications you may be taking in order to avoid any possible serious drug interactions. Please see important information on the next page. Ask your doctor if Pravachol is right for you. For more information on first heart attack prevention, call

1 - 8 0 0 - P R E V E N T .

Visit our Web site at www.pravachol.com

PRAVACHOL
pravastatin sodium

Proven to help prevent a first heart attack.



*"Irene, I know how
afraid you have been
about having a stroke.
So take some advice
from your kid brother."*

-Bill Courtney

FOR PEOPLE WHO'VE HAD A HEART ATTACK
AND HAVE NORMAL CHOLESTEROL:

PRAVACHOL HAS JUST BEEN PROVEN
TO REDUCE THE RISK OF STROKE
OR MINI-STROKE BY 26%
AND HEART ATTACK BY 24%.

MAKE THE PRAVACHOL CALL

1-877
PRAVA
CALL.

A new clinical study in men and women with a history of heart attack and normal cholesterol proves Pravachol, from Bristol-Myers Squibb Company, actually reduces the risk of heart attack and stroke or mini-stroke. Importantly, 84% of the patients in the study were already taking aspirin, a common medicine for reducing the risk of recurrent heart attacks.

You already know that diet and exercise can lead to a healthier life. But if you, or someone you know, has had a heart attack, and even has normal cholesterol, you could still be at risk of a stroke or another heart attack. So call your doctor about Pravachol, and find out if you could be doing even more for yourself than you already are.

PRAVACHOL, in combination with diet and exercise, is proven to reduce the risk of recurrent heart attack, the need for heart surgery (such as bypass or angioplasty), stroke or mini-stroke (transient ischemic attack [TIA]) based on a landmark study in people with normal cholesterol who had experienced a heart attack. Because PRAVACHOL is a prescription drug, you should ask your doctor or healthcare professional if PRAVACHOL is right for you. As with most medications, PRAVACHOL isn't for everyone, including women who are pregnant or nursing or may become pregnant, people who are allergic to any of its ingredients, or by anyone with liver disease. Your doctor may do simple blood tests to check your liver function before and during treatment with PRAVACHOL. Some mild side effects, such as slight rash or stomach upset, occur in about 2-4% of patients. Muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. Be sure your doctor knows about other medications you may be taking in order to avoid any possible serious drug interactions. Please see important information on the next page.

PRAVACHOL*
pravastatin sodium ^{20 mg} tablets
www.pravachol.com

Bristol Myers Squibb Company

* TOTAL CHOLESTEROL UNDER 240 mg/dL

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Visit our Web site at www.pravachol.com

PRAVACHOL
pravastatin sodium

Proven to help prevent
a first heart attack.



6:00am Yoga

7:00am Cereal and fruit

Still not enough?

12:00 Noon Turkey wrap

Walk home

7:00pm Garden salad

9:00pm Stretching exercises

You exercise and eat right, but if you still have high cholesterol, you may be at risk for a heart attack.

Pravachol (pravastatin sodium), in combination with diet and exercise, not only lowers cholesterol, it's also proven to help prevent heart attacks. In fact, Pravachol reduces "bad" cholesterol by 34% (based on a 40 mg dose). And in clinical trials, Pravachol is the only drug of its kind proven to help prevent both first and second heart attacks.

Pravachol has been safely prescribed for millions and is well tolerated. So ask your doctor about adding Pravachol to your diet and exercise regimen. You'll know in your heart you did the right thing.

In combination with diet and exercise, Pravachol is indicated:

- To reduce the risk of heart attack, the risk of undergoing heart surgery (such as bypass or angioplasty), and reduce the risk of death from heart disease in patients with elevated cholesterol and no evidence of heart disease.
- To reduce the risk of another heart attack, the risk of heart surgery (such as bypass or angioplasty), and the risk of stroke or mini-stroke in patients with a history of heart attack and total cholesterol < 240 mg/dL.
- To slow the progression of atherosclerosis and reduce the risk of heart attack in patients with elevated cholesterol and evidence of heart disease, including previous heart attack.

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Please see important information on next page.

PRAVACHOL
pravastatin sodium ^{40 mg} tablets

Proven to help prevent heart attacks

Ask your healthcare provider if Pravachol is right for you. For more information, call toll-free

1-877-PRAVA-CALL

or visit our Web site at www.pravachol.com

Cross College in Indiana. "Young people get tired of hearing that once upon a time people yearning for silence and there is."

enthusiastic about the other of spirituality he sees on city for "high-energy, almost over and worship." Catholic renewal, which got its start in Japanese University group on that felt a visitation by the runs thousands of prayer United States, where work in tongues or collapse

in laughter or tears. "Young people got tired of hearing that once upon a time people experienced God directly," says historian Martin E. Marty of the University of Chicago. "They want it to happen for themselves. They don't want to hear that Joan of Arc had a vision. They want to have a vision." It's a little more problematic when the Holy Spirit visits during a regular mass. Clayton Elsch, a retired technician, was enthusiastic when a charismatic priest took over Precious Blood Parish in Stephenson, Mich., even after some of his friends left for more-traditional parishes. Still, he found that

to Nepal, where
ce with her past.

Go



astery outside Katmandu in 1969, she was the lone woman among 60 monks; everything around her was strange. She learned to adjust to the sounds of gongs and conch shells, of chanted prayers. She hiked miles up a mountainside to study with Lama Thubten Yeshe, who taught her that she already had the nature of the Buddha within, if only she could be still enough to find it. It was a powerful message. The bias she faced in childhood "had convinced me that I was unworthy," she says. "I felt humiliated and undeserving." But through Buddhism, she learned to empty her mind of negative thoughts and self-doubt. Whites in Alabama might reject her, but Lama Yeshe came to call her "daughter."

Decades later, the practices she learned in Nepal are still very much a part of her life. Every morning, Willis goes to the altar in her study, adorned with brass offering bowls, incense, statues of Buddhist deities and photos of Lama Yeshe and the Dalai Lama. Her prayers focus on the tasks of the day, so that her teachings may be pure and accessible and her work may help reduce suffering in the world. "In a time when everyone's faced with such fear and hopelessness, these practices help rekindle hope," she says.

They also help rekindle compassion, a Christian virtue as well as a Buddhist value. "The Bible says 'love your neighbor,' but it doesn't tell you how," Willis says. Buddhist meditation taught her how to endure a slight and let it go—and to pray deeply for the good of humankind, so that all may find inner

CEDED ME THAT I WAS UNWORTHY.'

—JAN WILLIS, professor of religion, Wesleyan University

ice or a piece," as she puts it. "And everything in her life is taught her compassion and it led her to her current job, at Wesleyan University. And how to make peace with the world isn't easy. Arriving at a mon-

peace. It's a subtle kind of love. "You're aware of your common humanity," she says. "You want them to avoid suffering." This realization enabled her, after more than 30 years away, to finally feel at home in her father's church. And it leads her to call herself today, at 57, by that rarest of appellations—an African-American Baptist Buddhist.

VYTORIN treats the 2 sources of cholesterol.



FOOD



FAMILY

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To learn more, call 1-877-VYTORIN or visit vytorin.com. Please read the Patient Product Information on the adjacent page.

Continue to follow a healthy diet, and ask your doctor about adding VYTORIN.



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VYTORIN.
(ezetimibe/simvastatin)

Treat the 2 sources of cholesterol.

ING TO THE HEART OF IT ALL

ives to live longer, healthier lives.

OULD YOU CARE?

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It may be tempting to believe that doing just one healthy thing will take care of your heart disease risk. For example, you may hope that if you walk or swim regularly, you can still eat a lot of fatty foods and stay fairly healthy. Not true. To protect your heart, it is vital to make changes that address each and every risk factor you have.



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VYTORIN.
(ezetimibe/simvastatin)

Treat the 2 sources of cholesterol.

heart, the sturdy wellspring of life, can be fatally deranged by a mental event. But it's not just sudden shocks like earthquakes that kill. Mounting evidence suggests that chronic emotional states such as stress, anxiety, hostility and depression take a far greater toll. "Fifty percent of people who have heart attacks do not have high cholesterol," points out Edward Suarez, associate professor of psychiatry and human behavior at Duke. The risk of psychological and social factors are almost as great as obesity, smoking and hypertension, the traditional medical markers for cardiovascular disease—which afflicts 70 million Americans and is the nation's No. 1 killer. Researchers are now starting to learn why. And a growing number of clinics are putting that insight to work in programs that tackle heart disease at one of its most unlikely sources: in the mind.

Our understanding has proceeded from the anecdotal to the epidemiological to the search for underlying mechanisms. As a critical-care nurse at Mad River Community Hospital in northern California in the 1980s, Debra Moser saw repeatedly how patients' attitudes seemed to affect the course of their heart disease. She was struck by one case involving a man in his 50s with an uncomplicated heart attack. He should have been out of the hospital within two or three days, but he lingered for six. "It was the first time I appreciated the power of negative thinking," says Moser. "He was very depressed, which is not unusual after a heart attack. But he obsessed over everything. He was hypervigilant about his case. It seemed to us that he worried himself into episodes of recurrent ischemia and chest pain." The chest pain wasn't just in his mind; tests showed reduced blood flow to the heart. Within a year, he suffered another heart attack and died.

Years later, Moser, now a professor of nursing at the University of Kentucky in Lexington, sought to quantify the effects she observed in that patient. At a meeting of the American Heart Association last fall she presented the results of a trial involving 536 heart-attack patients. She had measured their anxiety levels with a standard multiple-choice psychological test, and kept track of whether

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VYTORIN.
(ezetimibe/simvastatin)

Treat the 2 sources of cholesterol.

BY JOANN E. MANSON, M.D., DR.PH.,
AND SHARI S. BASSUK, SC.D.

HORMONE THERAPY IS AN appropriate choice for some, but not all, women. On the benefit side, hormone therapy relieves hot flashes, night sweats and vaginal dryness, and it may improve sleep, mood and concentration. It also preserves bone density and protects against fractures. But there also are risks, including higher rates of breast cancer, stroke, blood clots in the legs and lungs and, for older women, coronary heart disease. What questions do you and your doctor need to answer to make an informed decision about hormone therapy? And if you choose hormone therapy, how can you minimize the risks? Here are the key elements of that conversation.

Do I have hot flashes or night sweats severe enough to disrupt my sleep, quality of life or ability to perform my usual activities?

FROM HARVARD MEDICAL SCHOOL Moderate to severe symptoms, which affect about one in five newly menopausal women, are the only compelling reason to take hormone therapy. If you're bothered by vaginal dryness only, consider low-dose vaginal estrogen rather than pills or patches.

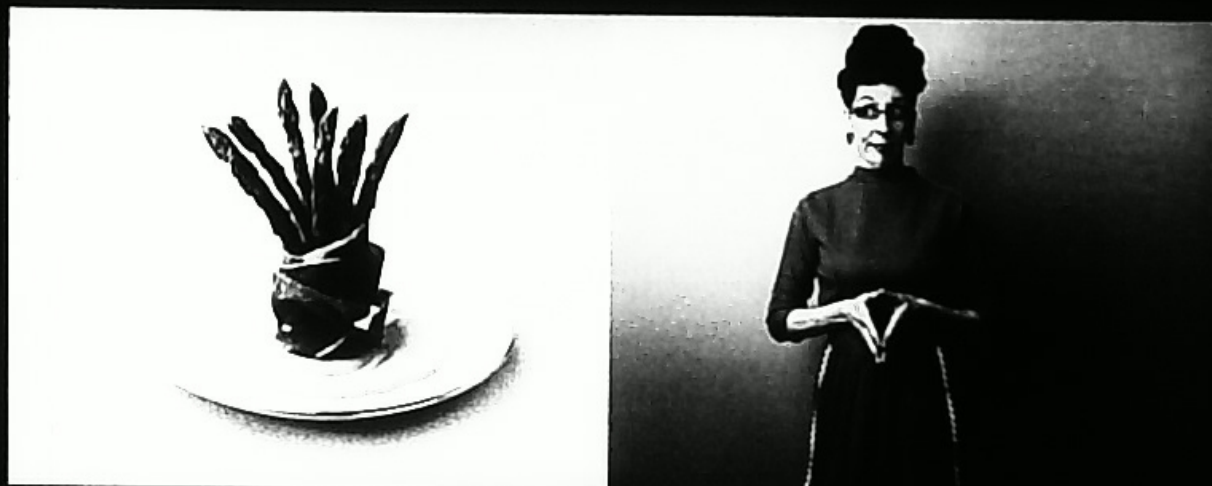
Do I have a health profile for which the benefits of hormone therapy will likely outweigh the risks?

Mounting evidence indicates that a woman's age and time since menopause (on average at the age of 51 in the United States), along with her personal health status, influence the risk-benefit balance. The best candidate for hormone therapy is a younger, recently menopausal woman—one whose final menstrual period occurred less than five years earlier—who isn't at high risk of heart disease, stroke or blood clots. An older woman many years past menopause and who is at higher risk of these cardiovascular conditions is not a good candidate. A woman who has had breast, uterine or ovarian cancer in the past, or who is at high risk of these cancers, should also avoid hormone therapy. [See the *bio* at the end of this piece for information about our book, which can help you estimate your risk of these health conditions.]

Am I open to the idea of using hormone therapy?

A woman who is reluctant to take hormones for any reason should never feel pressured by her doctor to do so. If you can answer "yes" to the three questions above, and you and your doctor determine that you're eligible to begin hormone therapy, you'll need to consider these issues:

Cholesterol comes from 2 sources: Food and Family



VYTORIN treats both

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(ezetimibe/simvastatin)

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Is Your Weight Hurting Your Heart?

are critical. It takes a multidisciplinary approach, with physicians, psychologists, exercise physiologists and other health professionals all playing a role, and a menu of options to help patients lose the weight. Patients benefit when they can choose approaches that are most useful for them, and that's different for every person.

George Washington University has a wonderful model, but it's very costly to reproduce. It involves using a variety of diverse techniques, such as a low-calorie diet, an exercise program, guidance in nutrition and behavior modification, and psychological support as needed.

Dr. Gerbstadt: The number-one requirement to be successful at weight loss is motivation. They have to want to do it. But even if they manage to drop pounds,

losing the weight is a long-term. In my research, their body weight will next nine months, though struggles in keeping behavioral approach that will fit into your life, regulating portions of food. Going to anything you can

Dr. Wickemeyer: In factor is exercise. Exercise and lower blood pressure seems to provide protection. Regular activity lowers your arteries. Patient over time. Unfortunately, a person's attention to health after a heart. They start eating right. Challenge is to get called, before the heart



heartLITE

Taking off—and keeping off—excess weight are both essential for a healthier heart. “Unlike medications for conditions such as diabetes to help most patients lose weight and sustain the weight loss,” says Dr. Wickemeyer, “exercise and behavior modification are critical.” Here’s what the experts recommend for dropping excess pounds.

- **Eat for life.** Instead of following rigid diet rules, Dr. Gerbstadt suggests trying these general principles: Eat two or three reasonable meals and several small snacks a day, incorporating protein and complex carbohydrates into each meal or snack. Use polyunsaturated or monounsaturated fats like olive and canola oils. Consume whole grains, fat-free and low-fat dairy, and plenty of fruits and vegetables, and minimize processed foods. “The idea of going on a diet is doomed to fail, because eventually you’re going to go off the diet,” Dr. Wickemeyer says. “When you go back to eating the way you used to, you gain the weight back.”
- **Get moving.** “Think of exercise as medicine,” says Dr. Wickemeyer. “You have to get your dose every day.”
- **Go slow.** Taking off 20 pounds in a year is a goal. If you weigh 200 pounds, a goal of 150, “instead of the take off 5 percent of your weight,” says Dr. Gerbstadt. “It might take five years, but you’re more likely to sustain the weight loss as a result.”
- **Consider surgery as an option.** “If you have a combination of both obesity and heart disease, surgery can prolong life,” says Dr. Wickemeyer.

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VYTORIN treats the 2 sources of cholesterol.



And VYTORIN was proven in clinical studies to lower bad cholesterol more than Crestor alone, more than Lipitor alone.

Talk to your doctor about treating the 2 sources of cholesterol, food and family, with VYTORIN. Only VYTORIN treats the 2 sources by helping to block cholesterol that comes from food and reducing the cholesterol your body makes naturally, based on family history. That's because only VYTORIN contains two cholesterol medicines, *Zetia* (ezetimibe) and *Zocor* (simvastatin), in a single tablet. And VYTORIN was proven in clinical studies to lower LDL (bad) cholesterol more than *Zocor* alone, more than *Lipitor* alone, and more than *Crestor* alone.

It's important to eat a healthy diet and to stay active. But if your cholesterol is still not where it should be, ask about treating the 2 sources of cholesterol. Ask your doctor if adding VYTORIN would be right for you.

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Talk to your doctor about treating the 2 sources of cholesterol, food and family, with VYTORIN. Only VYTORIN treats the 2 sources by helping to block cholesterol that comes from food and reducing the cholesterol your body makes naturally, based on family history. That's because only VYTORIN contains two cholesterol medicines, *Zetia* (ezetimibe) and *Zocor* (simvastatin), in a single tablet. And VYTORIN was proven in clinical studies to lower LDL (bad) cholesterol more than *Zocor* alone, more than *Lipitor* alone, and more than *Crestor* alone.

It's important to eat a healthy diet and to stay active. But if your cholesterol is still not where it should be, ask about treating the 2 sources of cholesterol. Ask your doctor if adding VYTORIN would be right for you.

Important Information: VYTORIN is a prescription tablet and isn't right for everyone, including women who are nursing or pregnant or who may become pregnant, and anyone with liver problems.

Unexplained muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. VYTORIN may interact with other medicines or certain foods, increasing your risk of getting this serious side effect. So tell your doctor about any other medications you are taking.

Please read the more detailed information about VYTORIN on the adjacent page.

To learn more, call 1-877-VYTORIN or visit vytorin.com.



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To learn more, call 1-800-347-7503.

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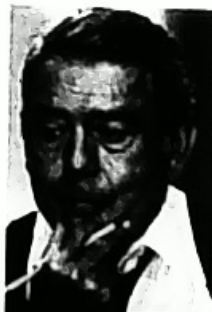
VYTORIN
(ezetimibe/simvastatin)

Treat the 2 sources of cholesterol.

BLOGGERS

called *freemypublic.com*, where another conservative lawyer, Harry MacDougald (a.k.a. Buckhead), had been arguing that the memos must be forgeries. Johnson titled his post "The 61st Minute," put it up online and headed off to work. The time was 7:51 a.m.

When he arrived at his office half an hour later, there were 50 e-mails in his inbox from readers offering further arguments and evidence disputing the CIA documents' authenticity. Johnson sifted through the comments and added some of them to his original post. This created a feedback loop. The more comments he posted, the more e-mail he got, which he then posted, generating even more e-mail, and so on. The process turbocharged itself. In all, he updated the post 15 or 20 times over the course of that day. The sheer speed and volume of the information came made Johnson nervous. He was desperately trying to stay on top of the flood of data pouring in over the tannin to make sure he wasn't going off on a crazy tangent. "We worked so hard over 24 years to build up an audience of serious readers," he says. "I thought, 'Am I out of my mind to be doing this? We're so far out on a limb.' I kept reading, looking for something from CIA, looking for the other side of the story. I



I thought
60 Minutes
was done for,
and I said so.

—HINDERAKER,
referring to the disputed
Rothstein report. By the
end of the day, 500 sites
had linked to Power Line

linked to their site about midafternoon, sending a torrent of traffic their way and promptly crashing their Web server. By the end of the day, about 500 sites had linked to Power Line. "I think it's fair to say that that post that Scott began is probably the most famous post in the young history of the blogosphere," Hinderaker says proudly.

Everybody knows the epilogue to this story. The memos are now widely believed to be forgeries. Certainly they were deprived of virtually any political force they might have had. CIA has launched a formal investigation into how the story got on the air in the first place. Rather has announced that he will step down this spring, and although neither CIA nor Rather acknowledges a link between the Power Line incident and the timing of his retirement, it would be hard to completely disentangle the two. CIA declined to comment for this story or to speculate on when the investigation will reach its conclusion. "Wherever they're done, we'll put it out," said a spokeswoman. As for Power Line, the site roughly doubled its readership, scoring half a million hits on Election Day. The news will never look as high and mighty again, nor will blogs ever look as low and lowly.

Where will they go from here? It's hard to imagine that bloggers will be content to remain media gadflies, sniping at the giants from below. In fact, it's entirely possible that they will ultimately be assimilated into the mainstream media they now openly despise. They'll start accepting advertising (Power Line already does), they'll go on *Leno*, they'll lose their outsider cred and their aura of driven-snow-purity. The best bloggers will be hired away by the hated news, bought off with Op-Ed columns and cable talk shows. And if bloggers do become Big Business, they will lose their free pass and become subject to the same scrutiny that 60 Minutes is under. After all, it's not as if Power Line never makes a mistake. It's

just that right now, because Scott Johnson isn't as famous as Dan Rather, the expectations and the stakes aren't very high. That will change.

But it won't change everything. Blogs are just too different, too wired, to become wholly mainstream. For starters, they're too cheap, too easy and too loud. They allow Americans to wear themselves off corporate-funded media and speak directly to one another. Dick Morris, a former adviser to Bill Clinton, points out that in past elections he relied on polls, ads and news coverage in analyzing the political situation but that in 2004 it just wasn't sufficient. "You couldn't do that," Morris says, "because the inputs were so pluralistic, this massive volume of e-mails and websites flowing back and forth, millions of social circles throughout the U.S., almost like Christmas-card lists crossing each other each day. It created a dynamic in which the campaign accounted for a relatively small proportion of the important inputs that happened. Most of them were spontaneously generated from below." People weren't paying attention to the Man. They were listening to one another.

The story of how three amateur journalists working in a homegrown online medium challenged a network news legend and won has many, many pages changing angles to it. One of the strangest and most radical is that the key information in "The 61st Minute" came from Power Line's readers, not its ostensible writers. The Power Lineers are quick, even eager, to point that out. "What this story shows more than anything is the power of the medium," Hinderaker says. "The world is full of smart people who have information about every imaginable topic, and until the Internet came along, there wasn't any practical way to put it together."

Now there it. A phenomenon like "The 61st Minute" is the result of the journalistic equivalent of massively parallel processing. The Internet is a two-way superhighway, and every Power Line reader is also a Power Line writer, stringer, ombudsman and editor at large. There are 100,000 cooks in the kitchen, and more are showing up all the time. Call it the Power Line effect. Conventional media may have more readers than blogs do, but conventional media can't leverage those readers the way blogs can. Want a glimpse of the future of blogs? The more popular blogs are, the stronger they get. And they're not getting any less popular. —With reporting by Dannah Khoo

FOOD AND FAMILY. The 2 sources of cholesterol.



VYTORIN treats them both.

You probably know that cholesterol comes from food. But what you might not know is that your cholesterol has a lot to do with your family history.

Now there's VYTORIN. When diet and exercise aren't enough, adding VYTORIN can help.

VYTORIN helps block the absorption of cholesterol that comes from food and reduces the cholesterol that your body makes naturally. And VYTORIN can dramatically lower your bad cholesterol 45%-65% (Average effect depending on dose, 50% at the usual starting dose.)

Ask your doctor about NEW VYTORIN.

Important information: VYTORIN is a prescription tablet and not right for everyone, including women who are nursing or pregnant or who may become pregnant, and anyone with liver problems. Unexplained muscle pain or weakness could be a sign of a rare but serious side effect and should be reported to your doctor right away. VYTORIN may interact with other medicines or certain foods, increasing your risk of getting this serious side effect. So, tell your doctor about any other medications you are taking.

To learn more, call
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Please read the Patient Product
Information on the adjacent page.

NEW
VYTORIN
(ezetimibe/simvastatin)

Treat the 2 sources of cholesterol.

VYTORIN™ (ezetimibe/simvastatin) Tablets

Patient Information about VYTORIN (VY-tor-in)
Generic name: ezetimibe/simvastatin tablets

Read this information carefully before you start taking VYTORIN. Review this information each time you refill your prescription for VYTORIN as there may be new information. This information does not take the place of talking with your doctor about your medical condition or your treatment. If you have any questions about VYTORIN, ask your doctor. Only your doctor can determine if VYTORIN is right for you.

What is VYTORIN?

VYTORIN is a medicine used to lower levels of total cholesterol, LDL (bad) cholesterol, and fatty substances called triglycerides in the blood. In addition, VYTORIN raises levels of HDL (good) cholesterol. It is used for patients who cannot control their cholesterol levels by diet alone. You should stay on a cholesterol lowering diet while taking this medicine.

VYTORIN works to reduce your cholesterol in two ways. It reduces the cholesterol absorbed in your digestive tract, as well as the cholesterol your body makes by itself. VYTORIN does not help you lose weight.

Who should not take VYTORIN?

Do not take VYTORIN:

- if you are allergic to ezetimibe or simvastatin, the active ingredients in VYTORIN, or to the inactive ingredients. For a list of inactive ingredients, see the "inactive ingredients" section at the end of this information sheet.
- if you have active liver disease or repeated blood tests indicating possible liver problems.
- if you are pregnant, or think you may be pregnant, or planning to become pregnant or breast feeding.

VYTORIN is not recommended for use in children under 10 years of age.

What should I tell my doctor before and while taking VYTORIN?

Tell your doctor right away if you experience unexplained muscle pain, tenderness, or weakness. This is because on rare occasions, muscle problems can be serious, including muscle break-down resulting in kidney damage.

The risk of muscle breakdown is greater at higher doses of VYTORIN.

The risk of muscle breakdown is greater in patients with kidney problems.

Taking VYTORIN with certain substances can increase the risk of muscle problems. It is particularly important to tell your doctor if you are taking any of the following:

- cyclosporine

- antifungal agents (such as itraconazole or ketoconazole)
- fibric acid derivatives (such as gemfibrozil, bezafibrate, or fenofibrate)
- the antibiotics erythromycin and clarithromycin
- HIV protease inhibitors (such as indinavir, nelfinavir, ritonavir, and zalcitabine)
- the antidepressant nefazodone
- amiodarone (a drug used to treat an irregular heartbeat)
- verapamil (a drug used to treat high blood pressure, chest pain associated with heart disease, or other heart conditions)
- large doses (1 g/day) of niacin or nicotinic acid
- large quantities of grapefruit juice (>1 quart daily)

It is also important to tell your doctor if you are taking coumarin anticoagulants (drugs that prevent blood clots, such as warfarin).

Tell your doctor about any prescription and nonprescription medicines you are taking or plan to take, including natural or herbal remedies.

Tell your doctor about all your medical conditions including allergies.

Tell your doctor if you:

- drink substantial quantities of alcohol or ever had liver problems. VYTORIN may not be right for you.
- are pregnant or plan to become pregnant. Do not use VYTORIN if you are pregnant, trying to become pregnant or suspect that you are pregnant. If you become pregnant while taking VYTORIN, stop taking it and contact your doctor immediately.

- are breast feeding. Do not use VYTORIN if you are breast feeding.

Tell other doctors prescribing a new medication that you are taking VYTORIN.

How should I take VYTORIN?

- Take VYTORIN once a day, in the evening, with or without food.
- Try to take VYTORIN as prescribed. If you miss a dose, do not take an extra dose. Just resume your usual schedule.
- Continue to follow a cholesterol-lowering diet while taking VYTORIN. Ask your doctor if you need diet information.

- Keep taking VYTORIN unless your doctor tells you to stop. If you stop taking VYTORIN, your cholesterol may rise again.

What should I do in case of an overdose?

Contact your doctor immediately.

What are the possible side effects of VYTORIN?

See your doctor regularly to check your cholesterol level and to check for side effects. Your doctor may do blood tests to check your liver before you start taking VYTORIN and during treatment.

In clinical studies patients reported the following common side effects while taking VYTORIN: headache and muscle pain (see What should I tell my doctor before and while taking VYTORIN?).

The following side effects have been reported in general use with either ezetimibe or simvastatin tablets (tablets that contain the active ingredients of VYTORIN):

- allergic reactions including swelling of the face, lips, tongue, and/or throat that may cause difficulty in breathing or swallowing (which may require treatment right away), and rash; inflammation of the pancreas; nausea; gallstones; inflammation of the gallbladder.

Tell your doctor if you are having these or any other medical problems while on VYTORIN. This is not a complete list of side effects. For a complete list, ask your doctor or pharmacist.

General Information about VYTORIN

Medicines are sometimes prescribed for conditions that are not mentioned in patient information leaflets. Do not use VYTORIN for a condition for which it was not prescribed. Do not give VYTORIN to other people, even if they have the same condition you have. It may harm them.

This summarizes the most important information about VYTORIN. If you would like more information, talk with your doctor. You can ask your pharmacist or doctor for information about VYTORIN that is written for health professionals. For additional information, visit the following web site: vytorin.com.

Inactive ingredients:

Butylated hydroxyanisole NF, citric acid monohydrate USP, croscarmellose sodium NF, hydroxypropyl methylcellulose USP, lactose monohydrate NF, magnesium stearate NF, microcrystalline cellulose NF, and propyl gallate NF.

Issued July 2004

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Manufactured for:
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Pharmaceuticals
North Wales, PA 19454, USA

By:
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Singapore 637768

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Pumping Iron for a Healthy Heart



by Larry J. Stewart, Ed.D.,
Professor of Medicine and Director
of Clinical and Research Exercise
Physiology, Johns Hopkins University
School of Medicine

WHILE innovative medications and therapeutic techniques such as gene therapy hold out promise for further advances in preventing or curing heart disease in the future, there's no question that "gym therapy" is an approach that works right now.

Most people know that exercise lowers blood pressure, reduces total cholesterol and boosts HDL. But exercise does much more than that. As early as age 25, men begin to lose muscle and gain fat if they don't exercise regularly. So if you're 40 or 50 and weigh the same as you did when you were 20, you probably now have a lot more fat—and less muscle—than you had then.

In men, much of that fat is deposited around the waist and abdomen. Those painfully obvious "love handles" actually point to a condition known as abdominal obesity.

A less visible—but more insidious—type of fat, known as visceral fat, also settles deep inside the abdominal cavity, wraps itself around several internal organs and is a risk factor for heart disease.

Fat doesn't just sit there

Fat is not an inert substance—it is an active organ. Among its harmful characteristics is the production of proteins called cytokines that promote inflammation and are associated with an increased risk of heart disease. Chronic inflammation can cause the lining of artery walls, making them susceptible to the accumulation of fatty plaque deposits that can ultimately rupture and cause a heart attack or stroke.

We had a group of people take part in a supervised series of exercises for 60 minutes three times a week, combining aerobic and resistance exercises that worked the heart and circulation and all the major muscle groups. At the end of

six months, both aerobic fitness and muscle strength improved. Yet the participants lost an average of only four pounds. When we looked them using sophisticated imaging methods, however, we noted a huge shift in body composition from fat to muscle. Most important for their hearts, they had dropped approximately 20 percent of their visceral fat.

We also noted that compared with nonexercisers, fewer participants who exercised had the metabolic syndrome, a deadly combination of high blood pressure, low HDL cholesterol, abdominal obesity, high triglycerides and glucose intolerance. The metabolic syndrome markedly increases the risk of developing heart disease and type 2 diabetes. We found that the greatest overall health benefit from exercise is not an

increased fitness level but the changing of one's body composition, particularly the decline of abdominal fat.

Just do it!

Many diseases associated with getting older can be prevented or at least delayed. It is matter how inactive you are now. If you start to increase your level of physical activity and maintain an active lifestyle, you will be less susceptible to heart disease, have less risk of developing diabetes and less risk of falling or breaking a bone. Physical activity today can make a major difference in how well you'll function in 30 or 40 years. The average male life expectancy is now

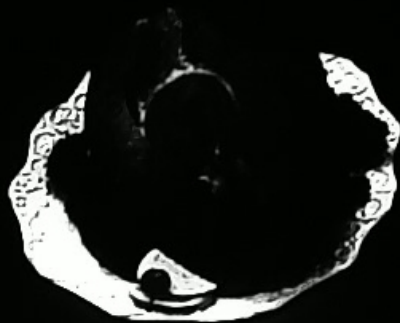
If you're 40 or 50 years old and weigh the same as you did when you were 20, you probably now have a lot more fat than you had then.

77 years. How healthy will you feel at that age?

Our research indicates that it takes anywhere from three to five months of regular activity to measure significant changes in health and fitness, so you can expect to see real improvements in six months if you stick with a well-planned program of physical activity. Don't try to do too much too soon or you may burn out.

Exercise is inexpensive, it's readily available, and you can do it on your own or you can work out with a friend. The options are endless and beneficial results are practically guaranteed—as long as you carry through on your initial resolve.

VYTORIN treats the 2 sources of cholesterol.



FOOD

FAMILY

You probably know that cholesterol comes from food. But what you might not know is that your cholesterol has a lot to do with your family history. VYTORIN treats both sources of cholesterol.

A healthy diet is important, but when it's not enough, adding VYTORIN can help. VYTORIN helps block the absorption of cholesterol that comes from food and reduces the cholesterol that your body makes naturally.

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To learn more, call 1-877-VYTORIN or visit vymorin.com. Please read the Patient Product Information on the adjacent page.

Continue to follow a healthy diet, and ask your doctor about adding VYTORIN.



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VYTORIN
(ezetimibe/simvastatin)

Treat the 2 sources of cholesterol.

stands back and takes a calm position.

BONO Bob and myself are good at the passionate. But sometimes you might not hear our words for the bluster.

GELDOF Bono's in love with the world. He wants to embrace it. I want to punch its lights out. We're psychotic Tweedledum and Tweedledee.

BONO The missing piece is a way in in the U.S. What Bob provides with his steel and hard raising and what Richard provides in terms of community in the cinematic arts and as a writer with his ability to deliver a message. I feel like I've been trying to do in the U.S.—but I'm not American. Really, until today, when Russell Simmons called and offered to help, we haven't had the American sense of ownership that we should. It's a real problem. I think it's going to turn around. But we've started very late.

HAVE YOU TAILORED YOUR MESSAGE IN EACH G-8 COUNTRY, AND IF SO, HOW HAVE YOU TAILORED YOUR MESSAGE TO AMERICANS?

BONO Warren Buffett gave me the best advice on this subject. He said, "Don't appeal to the conscience of America. Appeal to the greatness of America, and you'll get the job done." **CURTIS** Insert in there "remarkably accurate impression of Warren Buffett." **BONO** Onstage I talk about my first impression of Americans, which was watching a man walk on the moon. We thought, Americans are small! But look what they can do when they get organized. **GELDOF** America doesn't have a lack of empathy, they just don't know the issues as well. Actually, today I had to defend the Bush Administration in France again. They refuse to

accept, because of their political ideology, that he has actually done more than any American President for Africa. But it's empirically so.

THERE'S BEEN A FAIR BIT OF CRITICISM ABOUT THE LACK OF AFRICAN MUSICIANS ON THE LIVE 8 BILL. YOU'VE ANNOUNCED A SEPARATE AFROCENTRIC SHOW IN COGNAC, BUT WHY NOT INTEGRATE THE AFRICAN

with him and John Lee Hooker

HE'S DEAD.

GELDOF It'd be difficult. [Laughter] Even more difficult than putting Pink Floyd back together. Well, not that much more difficult.

YOU'VE ASKED THE POPE TO SUPPORT LIVE 8. IS THERE A CONTRADICTION IN ASKING THE WORLD'S MOST VISIBLE OPPONENT OF CONDOM

ANYONE HERE KNOW HOW TO SING?



Performers of Live 8 concerts around the world include, clockwise from top left, Mariah Carey, a reunited Pink Floyd, Chris Martin of Coldplay, Faith Hill and Tim McGraw, Madonna and S.O. Good

ACTS INTO THE OTHER LINE-UPS? ISN'T CULTURAL AWARENESS AS IMPORTANT AS ISSUE AWARENESS? **GELDOF** This is a political event, not a cultural event. In order to get political momentum, one guy with a buzzer is not enough. You need millions. The lingua franca of the planet, as we learned from Live Aid, is not English—it's pop music. From Guangzhou to Frankfurt, they listen to 50 Cent, Eminem, U2 and Coldplay. Do they listen to the more esoteric individual cultures? No. That's reality. Do they listen to Muddy Waters? I wish they did. Then I'd put a ball up there.

USE TO HELP YOU ASSIST PEOPLE RAVAGED BY AIDS? **GELDOF** The condom issue is relevant, but it's not the single relevant point. Ratzinger [now Pope Benedict XVI], from what I understand, put the spinal cord into John Paul's theology on the poor. His more profound theologians are to do with the souls of the poor, if you like. I just visited him to sing a psalm up at Edinburgh.

DOES HE HAVE A BAND?

GELDOF Don't know. I wrote to him what I thought was a coherent letter and got back a signed photograph.

[Laughs] I pointed out to one of the Cardinals that I didn't require a picture, signed or otherwise.

RICHARD, YOU AREN'T PERFORMING AT LIVE 8, BUT YOU'VE MADE THE G-8 ON THE CAVE (WHICH WILL AIR ON HBO THIS SATURDAY). ARE YOU SURE A ROMANTIC COMEDY ABOUT POVERTY AND THE G-8 IS A GOOD WAY TO GET PEOPLE TO ENGAGE IN THE ISSUES?

CURTIS Well, we're all limited in what we can do. You don't ask Bono to write an opera on the subject of something political, and as I was trying to address a passion of mine, it occurred apt that I should do it in the kind of way that I'd written films before. If I'd tried to write a serious political drama, I wouldn't have known where to begin. So I tried to write about politics from the point of view of a normal person. **GELDOF** It's quite powerful. I saw it the other night, and my girlfriend was crying. She fell in love with Richard immediately. Mr. F. Sensitivity and all.

WHICH OF THE G-8 LEADERS DO YOU THINK REMAINS THE TOUGHEST NUT TO CRACK?

BONO The most important and toughest nut is still President Bush. He feels he's already doubted and tripped and is Africa, which he has. But he started from far too low a place. He can stand there and say he's paid at the office already. He shouldn't, because he'll be left out of the history books. But it's hard for him because of the expense of the war and the debt. But I have a hunch that he will step forward with something. And it'll take somebody like him.

YOU'RE TRYING TO LOBBY HIM RIGHT NOW, AREN'T YOU? **GELDOF** We'll see if it works. ■

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FOOD



FAMILY

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Treat the 2 sources of cholesterol.

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—BOB GELDOF, Live 8 Organizer

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Health for Life

No Time for Wrinkles

Women have more beauty-treatment choices than ever. Is that a good thing?

BY JENNIFER BARRETT

ALISA KAUFFMAN HAS BEEN practicing dentistry for nearly two decades, but some new patients still mistake the 44-year-old New Yorker for a dental school student. "I tell them it's just the Botox." But the popular treatment, which paralyzes the muscles that form wrinkles, is actually just one weapon in Kauffman's anti-aging arsenal. She began applying Retin-A (retinoic acid) daily to wrinkle-prone areas of her face at 28, well before the vitamin-A derivative became widely accepted as a topical treatment for fine lines. At 40, she added more potent products. Besides periodic Botox shots for her forehead and eyes, every few months she gets injections of Restylane to smooth the skin by her mouth (the transparent hyaluronic acid gel, used to fill wrinkles, was approved by the Food and Drug Administration in December). Kauffman also regularly undergoes intense pulse-light (IPL) treatments—laser-like pulses of high-intensity light that penetrate the skin—to get rid of a sprinkling of sun spots on her face. "I am very vigilant," says Kauffman, an attractive medical professional. "I try to take care of things before they happen."



DEDICATED: The Kauffmans care about looking good

That's much easier to do these days. The quest for youth—or, at least, the appearance of it—is ages old. But the range of mesurgical, anti-aging options has soared in recent years. Most women are wary of going under the knife in their 30s and 40s, but they'll undergo a temporary treatment that can smooth their skin in one lunch break. Less costly and more convenient than surgery, cosmetic injectables, IPL therapy and other wrinkle remedies are becoming as more and more women incorporate them into their

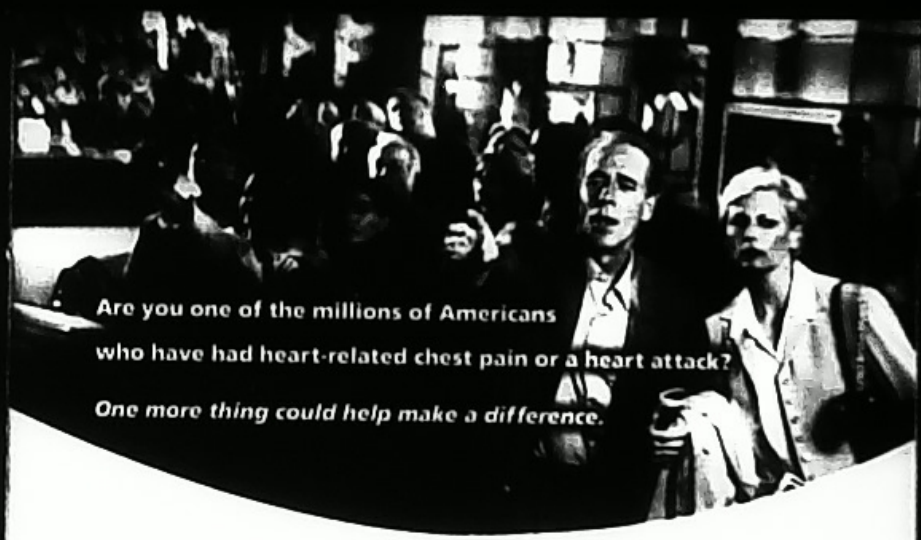
beauty-maintenance routines. The American Society of Plastic Surgeons says 6.9 million such procedures were performed last year—up 41 percent from the year before. Women make up 86 percent of the patients. A few years ago doctors relied on fillers that came from cows and required a skin test. Now there's a range of fillers, from Restylane to CosmoDerm and CosmoPlast—both made from human collagen that require no test—and, of course, Botox, which gained FDA approval just two years ago for the treatment of frown lines. "They're extraordinarily quick to perform

and have an extraordinarily rapid recovery—if there is a recovery period at all," says New York surgeon Philip Miller, who performs Kauffman's procedures. He and other practitioners say the unoperated nature of the treatments keeps women coming back for more. "I have several female patients who feel that because they are in the workplace and around so many young people, they need to do whatever they can to keep up a more youthful appearance—without using surgery," says Boston dermatologist Lynn Baden. "It makes you look good, so why not do it?" says Robin Rothloff, 46, a real estate investor in Newton, Mass.,

Why not do it? Every person I know does it, young and old.

—ROBIN ROTHLOFF, 46-year-old real-estate investor, Newton, Mass.

PHOTOGRAPH BY JANELLE REYER FOR NEWSWEEK



Are you one of the millions of Americans who have had heart-related chest pain or a heart attack? One more thing could help make a difference.

PLAVIX[®] added to aspirin and your current medications, helps raise your protection against future heart attack or stroke. If you've been hospitalized for heart-related chest pain or a certain type of heart attack, conditions that doctors call ACS or Acute Coronary Syndrome, ask your doctor about adding PLAVIX.

For most, heart attack or stroke is caused when platelets form dots that block the flow of blood to the heart or brain. Think aspirin and your other medications (are enough) Adding PLAVIX could help protect you against a future heart attack or stroke.



PLAVIX and your other medications work in different ways. Adding PLAVIX can go beyond your current treatment. Prescription PLAVIX, taken with aspirin, plays an own role in keeping platelets from sticking together and forming clots—which helps keep blood flowing.

Talk to your doctor about PLAVIX. For more information, visit www.plavix.com or call 1-800-748-5478.

Plavix
(clopidogrel bisulfate) 75mg tablets

Add more protection against heart attack or stroke

IMPORTANT INFORMATION: If you have a medical condition that causes bleeding, such as stomach ulcers, you shouldn't use PLAVIX. The risk of bleeding may increase with PLAVIX, and when you take PLAVIX with certain other medications, including aspirin. Review your medications with your doctor to minimize this risk. Additional risk, but serious, side effects could occur.

Read the important product information on the FDA warning page.

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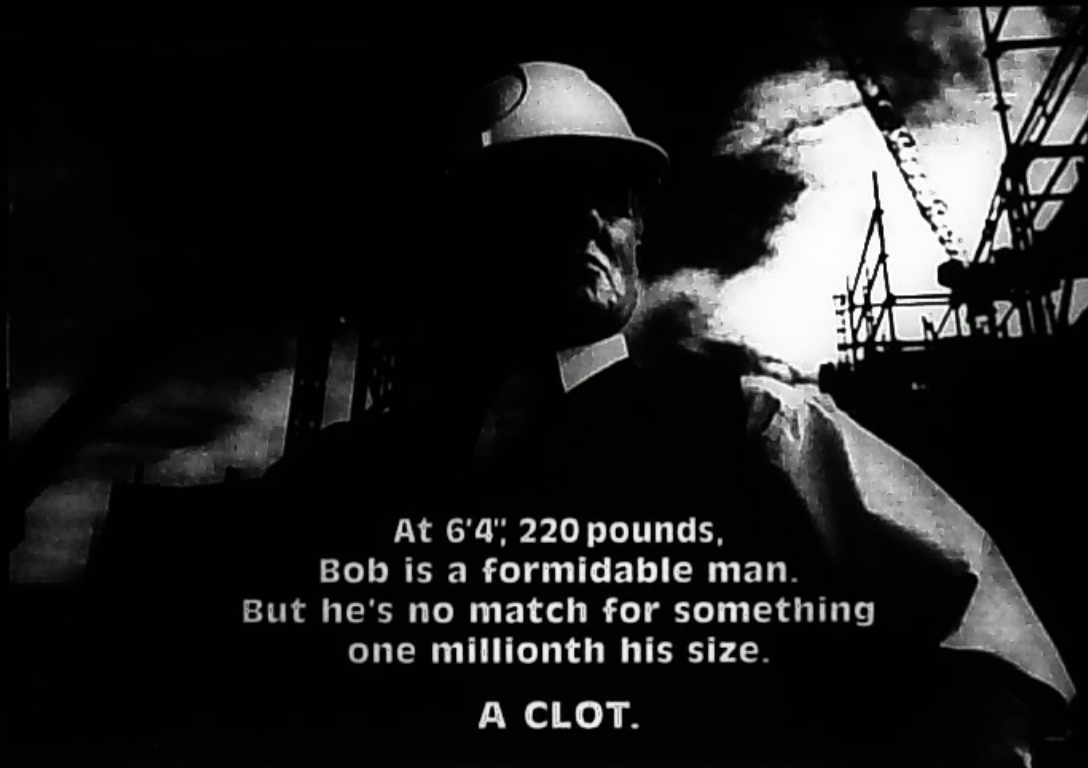
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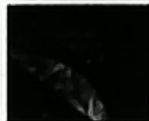


At 6'4", 220 pounds,
Bob is a formidable man.
But he's no match for something
one millionth his size.

A CLOT.

Clots are the number one cause of heart attack and stroke, but you can help reduce your risk.

This is important information if you've been hospitalized with heart-related chest pain or a certain type of heart attack. That's because these conditions, known as Acute Coronary Syndrome - or ACS - are usually caused when blood platelets stick together and form clots that block blood flow to your heart. And if you've already had a clot, you're at an increased risk for a future heart attack or stroke.



PLAVIX, in combination with aspirin, helps provide greater protection against a future heart attack or stroke than aspirin alone. PLAVIX, taken with aspirin, plays its own role in helping reduce your risk of heart attack and stroke. That's because, unlike your cholesterol and blood pressure medications, prescription PLAVIX works directly to help keep blood platelets from sticking together and forming clots.



IMPORTANT INFORMATION: If you have a stomach ulcer or other condition that causes bleeding, you shouldn't use PLAVIX. When taking PLAVIX alone or with some medicines including aspirin, the risk of bleeding may increase. To minimize this risk, talk to your doctor before taking aspirin or other medicines with PLAVIX. Additional rare but serious side effects could occur.

Talk to your doctor today to learn more about PLAVIX. Or visit www.plavix.com or call 1.800.908.1797.

See important product information on the following page.

ONCE-A-DAY

Plavix

(clopidogrel bisulfate) 75mg tablets

BECAUSE YOU'RE NO MATCH FOR A DANGEROUS CLOT.

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Bradford

...ity in Clint Eastwood's WWII
...ers. Is the former teen dream
...ty as a grown-up? Sir, yes sir!

...eps for the movie, and it's such a great way
...to stay in shape. And I play any sport I
...can get my hands on."

...● **LIVING SINGLE** Since recently end-
...ing a 2 1/2-year relationship, "I'm
...more single now than I have been in
...a long time, and I'm not comfortable
...with it yet," he says. "When you say
...that, does a girl go, 'Oh, God, emo-
...tional baggage?' or does she go, 'Oh,
...that's sweet?'"

...● **HIS FAVORITE FEMALE BODY PART**
... "There's always something in the eyes.
...There's either this little extra thing
...that's there, or there's not." ●

...OPLE.COM/YOUREXYMAN

Photograph by MAOMI KALTMAN

Clots are the number one cause of heart attack and stroke, but you can help reduce your risk.

This is important information if you've been hospitalized with heart-related chest pain or a certain type of heart attack.

That's because these conditions, known as Acute Coronary Syndrome—or ACS—are usually caused when blood platelets stick together and form clots that block blood flow to your heart. And if you've already had a clot, you're at an increased risk for a future heart attack or stroke.



PLAYIX, in combination with aspirin, helps provide greater protection against a future heart attack or stroke than aspirin alone.

PLAYIX, taken with aspirin, plays its own role in helping reduce your risk of heart attack and stroke. That's because, unlike your cholesterol and blood pressure medications, prescription PLAYIX works to help keep blood platelets from sticking together and forming clots.



IMPORTANT INFORMATION: If you have a stomach ulcer or other condition that causes bleeding, you shouldn't use PLAYIX. When taking PLAYIX alone or with some medicines including aspirin, the risk of bleeding may increase. To minimize this risk, talk to your doctor before taking aspirin or other medicines with PLAYIX. Additional rare but serious side effects could occur.

Talk to your doctor today to learn more about PLAYIX.
Or visit www.playix.com or call 1.800.579.5413.

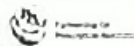
ONCE-A-DAY
Plavix.
(clopidogrel bisulfate) 75mg tablets

BECAUSE YOU'RE NO MATCH FOR A DANGEROUS CLOT.

See important product information on the following page.

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Delivering the news to
millions of readers every day,
Carl is a formidable man.
But he was no match for something
smaller than a drop of ink.

A CLOT.

After a little research, Mr. Mullany found an enterprising New York City toy salesman named Saul Mandelstein, who agreed that they did. "Saul said we might get a couple of good years out of the ball, but it was probably a dud," Dave remembers. "He also said we needed to sell it with a bat." The Mullanys started making a tapered bat from ash—Dave's job was to wrap electrical tape on the handle—and soon Wootworth's was carrying Wiffles.

It's been 50 years since the Mullanys took their funny little ball to that diner. The wooden bat was discontinued in 1972, but other than that not much has changed. The Wiffle Ball

Inc. still operates from the same unpretentious brick factory in Shelton, Conn., where millions and millions of balls have rolled off the line.

Dave's dad died in 1990, well after repaying the friends who loaned him money to start his business, and well after confessing to Ivy the family's financial straits before the inventing of the Wiffle. Today, Dave and his two sons run the place.

And how do the Mullanys unwind once they've finished a week at the factory? After a recent Sunday dinner with his sons and grandchildren, Dave was sore—from pitching. "It's a great game," he says. "Always has been."

CARTOON QUIPS

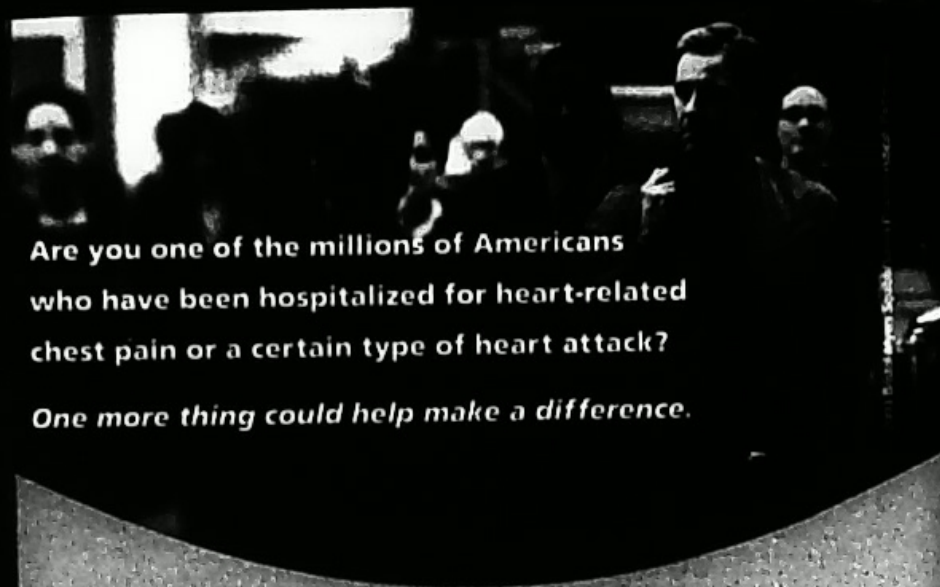
Son to father: "Can you help me with my ethics homework, or would that be missing the point?" BUNNY HOEST AND JOHN REINER in Parade

One dog to another: "What if the hand that feeds us is surprisingly tasty?" PETE MUELLER in Bark

Teen looking under seat cushion: "I wish someone would invent a phone that's attached to the wall, so I wouldn't keep losing it." BUNNY HOEST AND JOHN REINER in Parade

RD CHALLENGE ANSWERS

Was RD Challenge (page 224) as simple as following a map? Or were you in need of a compass? See how worldly-wise you are by checking these answers. And if you haven't taken the quiz yet, don't peek! 1. Moscow, Russia; 2. Manila, Philippines; 3. Budapest, Hungary; 4. Bogotá, Colombia; 5. Canberra, Australia; 6. Santiago, Chile; 7. Kinshasa, Congo; 8. London, England; 9. Ankara, Turkey; 10. Wellington, New Zealand; 11. Tripoli, Libya; 12. Ottawa, Canada; 13. Cape Town, South Africa; 14. Kingston, Jamaica; 15. Helsinki, Finland.



Are you one of the millions of Americans who have been hospitalized for heart-related chest pain or a certain type of heart attack?

One more thing could help make a difference.

PLAVIX[®] added to aspirin and your current medications, helps raise your protection against future heart attack or stroke. If you've been hospitalized for heart-related chest pain or a certain type of heart attack, what doctors call ACS (Acute Coronary Syndrome), ask your doctor about adding PLAVIX.



The platelets in your blood can form clots. These clots may block the flow of blood to the heart or brain. Think aspirin and your other medications alone are enough? Adding PLAVIX could help protect you against a future heart attack or stroke.



PLAVIX and your other medications work in different ways. Adding PLAVIX can go beyond your current treatment. Prescription PLAVIX, taken with aspirin, plays its own role in keeping platelets from sticking together and forming clots—which helps keep blood flowing.

Talk to your doctor about PLAVIX. For more information, visit www.plavix.com or call 1-888-663-9708.

ONCE A DAY
Plavix
(clopidogrel bisulfate) 75 mg tablets

Add more protection against heart attack or stroke

IMPORTANT INFORMATION: If you have a medical condition that causes bleeding, such as stomach ulcer, you shouldn't use PLAVIX. The risk of bleeding may increase with PLAVIX, and when you take PLAVIX with certain other medicines, including aspirin. Review your medicines with your doctor to minimize this risk. Additional rare, but serious, side effects could occur.

Please see important product information on the following page.

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GO AHEAD: MAKE US LAUGH

EVERYONE'S got a funny story. Just send us yours, and if we publish it in *Reader's Digest*, you'll be laughing all the way to the bank. Here's how it works:



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WE PAY \$100

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THE RULES

Please note your name, address and phone number with all submissions. Previously published material must include the name, date and page number of the source. Original items **should be less than 100 words**, and become our property upon publication and payment. All contributions may be edited and cannot be acknowledged or returned.

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- rd.com (Click on "Fun")
- *Reader's Digest*, Box 100, Pleasantville, N.Y. 10572-0100 (Address your submission to the appropriate humor category—*All in a Day's Work*, *Life in These United States*, etc.)

Rates are subject to change; for current information, please visit rd.com.

10

YOU DON'T WANT ANOTHER HEART ATTACK OR ANOTHER STROKE TO SNEAK UP ON YOU.

PLAVIX[®] HELPS KEEP BLOOD PLATELETS FROM STICKING TOGETHER AND FORMING CLOTS, WHICH HELPS PROTECT YOU FROM ANOTHER HEART ATTACK OR STROKE.

If you've had a heart attack or stroke, the last thing you need is another one sneaking up on you. PLAVIX may help. PLAVIX is a prescription medication for people who have had a recent heart attack or recent stroke, or who have poor circulation in the legs, causing pain.

PLAVIX OFFERS PROTECTION. PLAVIX is proven to help keep blood platelets from sticking together and forming clots, which helps keep your blood flowing. This can help protect you from another heart attack or stroke.

WITHOUT PLAVIX



Blood platelets can stick together and form clots.

WITH PLAVIX



PLAVIX helps keep blood platelets from sticking together.

PLAVIX IS A SMALL PILL YOU TAKE ONCE A DAY. If you have a medical condition that is causing bleeding, such as a stomach ulcer, you should not use PLAVIX. Side effects include itching, rash, diarrhea and bruising. Additional rare, but serious, side effects could occur.

TALK TO YOUR DOCTOR ABOUT PLAVIX. For more information, visit www.plavix.com or call 1-888-672-8033.

ONCE-A-DAY
Plavix[®]
(clopidogrel bisulfate) 75-mg tablets

PROVEN TO HELP PROTECT FROM ANOTHER HEART ATTACK OR STROKE

Please see important product information on the following page.

sanoft-synthelabo

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PLAVIX®

clopidogrel bisulfate tablets

INDICATIONS AND USAGE: PLAVIX (clopidogrel bisulfate) is indicated for the reduction of atherothrombotic events (myocardial infarction, stroke, and vascular death) in patients with atherosclerotic cardiovascular disease (coronary artery disease, cerebrovascular disease, peripheral vascular disease).

CONTRAINDICATIONS: PLAVIX is contraindicated in patients with hypersensitivity to the drug, aspirin or any component of the product, and those with active peptic bleeding and/or a recent history of gastrointestinal hemorrhage.

WARNINGS: Thrombotic thrombocytopenic syndrome (TTP) has been reported while taking PLAVIX, sometimes after a prior episode of hemolysis. TTP is a serious condition requiring prompt treatment. It is characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal insufficiency, neurologic symptoms, and fever. PLAVIX should be discontinued if a patient develops any of these signs and symptoms. PLAVIX should be discontinued if a patient develops any of these signs and symptoms.

PRECAUTIONS: General: As with other antiplatelet agents, PLAVIX should be used with caution in patients who may be at risk of increased bleeding with trauma, surgery, or other pathological conditions. If a patient is to undergo elective surgery and an antiplatelet effect is not desired, PLAVIX should be discontinued 7 days prior to surgery. GI Bleeding: PLAVIX prolongs the bleeding time. In CAPRIE, PLAVIX was associated with a rate of gastrointestinal bleeding of 0.2% in 2.7% of aspirin. PLAVIX should be used with caution in patients who have aspirin with a propensity to bleed and/or in whom drug-drug interactions may increase such aspirin and other nonsteroidal anti-inflammatory drug (NSAID) effects. Use with Caution in Patients Taking PLAVIX: Use in patients with severe hepatic disease, and in those taking blood-thinning PLAVIX should be used with caution in this population.

Information for Patients: Patients should be told that PLAVIX may take their aspirin that is not bleeding when they take PLAVIX and that they should never stop aspirin because of their physician's advice about their aspirin and should not stop taking PLAVIX before any surgery is scheduled and before any new drug is taken.

Drug Interactions: Study of specific drug interactions yielded the following results: Aspirin: Aspirin did not modify the clopidogrel-mediated inhibition of ADP-induced platelet aggregation. Concomitant administration of 325 mg of aspirin twice a day for 7 days did not significantly increase the proportion of bleeding time increased by PLAVIX. PLAVIX potentiated the effect of aspirin on collagen-induced platelet aggregation. The safety of chronic concomitant administration of aspirin and PLAVIX has not been established. Heparin: In a study in healthy volunteers, PLAVIX did not significantly modify the heparin dose to alter the effect of heparin on coagulation. Concomitant administration of heparin had no effect on inhibition of platelet aggregation induced by PLAVIX. The safety of this combination has not been established. However, and aspirin use should be avoided with caution. Nonsteroidal Anti-inflammatory Drug (NSAID): In healthy volunteers receiving rofecoxib, concomitant administration of PLAVIX was associated with increased gastric mucosal prostaglandin levels. NSAIDs and PLAVIX should be administered with caution. Rofecoxib: The safety of the combination of PLAVIX (clopidogrel bisulfate) with rofecoxib has not been established. Concomitantly, concomitant administration of these two agents should be undertaken with caution. See Precautions, General. Other Concomitant Therapy: No clinically significant pharmacodynamic interactions were observed when PLAVIX was administered with atenolol, atenolol, aspirin, aspirin, and ibuprofen. The pharmacodynamic activity of PLAVIX was not significantly influenced by the administration of phenobarbital, carbamazepine, or acetaminophen. The pharmacodynamics of clopidogrel or thienopyridines were not modified by the administration of PLAVIX (clopidogrel bisulfate). At high concentrations, clopidogrel may inhibit the metabolism of phenytoin, lamotrigine, lisdexamfetamine, sertraline, bupropion, fluoxetine, and many non-steroidal anti-inflammatory agents, but there are no

data with which to predict the magnitude of these interactions. Caution should be used when any of these drugs is administered with PLAVIX. In addition to the above specific interaction studies, patients entered into CAPRIE received a variety of concomitant medications including diuretics, beta-blockers, agents, angiotensin converting enzyme inhibitors, calcium antagonists, cholesterol lowering agents, coronary vasodilators, anti-diabetic agents, anti-epileptic agents and hormone replacement therapy without evidence of clinically significant adverse interactions.

Drug Laboratory Test Interactions: None known. **Carcinogenesis, Mutagenesis, Impairment of Fertility:** There was no evidence of tumor promotion when clopidogrel was administered for 78 weeks to mice and 134 weeks to rats at dosages up to 75 mg/kg per day, which afforded plasma exposures 25 times that in humans at the recommended daily dose of 75 mg. Clopidogrel was not genotoxic in four *in vitro* tests (Ames test, Ames test in rat hepatocytes, gene mutation assay in Chinese hamster fibroblasts, and metaphase chromosome analysis of human lymphocytes) and in one *in vivo* test (micronucleus test by oral route in mice). Clopidogrel was found to have no effect on fertility of male and female rats at oral doses up to 400 mg/kg per day (52 times the recommended human dose on a mg/m² basis).

Pregnancy: Pregnancy Category B. Reproduction studies performed in rats and rabbits at doses up to 500 and 300 mg/kg/day respectively, 63 and 78 times the recommended daily human dose (a mg/m² basis), revealed no evidence of impaired fertility or toxicity due to clopidogrel. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of a human response, PLAVIX should be used during pregnancy only if clearly needed.

Nursing Mothers: Studies in rats have shown that clopidogrel and/or its metabolites are excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the nursing woman.

Pediatric Use: Safety and effectiveness in the pediatric population has not been established.

ADVERSE REACTIONS: PLAVIX (clopidogrel bisulfate) has been evaluated for safety in more than 11,300 patients, including over 7,000 patients treated for 1 year or more. The overall tolerability of PLAVIX was similar to that of aspirin regardless of age, gender and race, with an approximately equal incidence (1.1%) of patients withdrawing from treatment because of adverse reactions. The clinically important adverse events observed in CAPRIE are discussed below.

Hemorrhage: In patients receiving PLAVIX in CAPRIE, gastrointestinal hemorrhage occurred at a rate of 2.0%, and required hospitalization in 0.7%. In patients receiving aspirin, the corresponding rates were 2.7% and 1.1%, respectively. The incidence of intracranial hemorrhage was 0.4% for PLAVIX compared to 0.5% for aspirin. Neurotoxicity (agranulocytosis) compared to 0.5% for aspirin. Neurotoxicity (agranulocytosis) compared to 0.5% for aspirin. Neurotoxicity (agranulocytosis) compared to 0.5% for aspirin. Neurotoxicity (agranulocytosis) compared to 0.5% for aspirin.

Other Adverse Reactions: In patients receiving PLAVIX in CAPRIE, other adverse reactions were reported in 2.5% of patients. The most common adverse reactions were: upper respiratory tract infection (8.7%), dyspepsia (4.5%), rhinitis (4.2%), bronchitis (3.7%), coughing (3.1%), rash (4.2%), and pruritus (3.3%).

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Adverse events occurring in 2.5% of patients on PLAVIX in the CAPRIE controlled clinical trial are shown below regardless of relationship to PLAVIX. The median duration of therapy was 20 months, with a maximum of 3 years.

Adverse Events Occurring in ≥ 2.5% of PLAVIX Patients

Body System/Event	% Incidence (% Discontinuation)	
	PLAVIX (n=8599)	Aspirin (n=8598)
Body as a Whole - general disorders		
Chest Pain	8.3 (0.2)	8.3 (0.3)
Accidental injury	7.9 (0.1)	7.3 (0.1)
Influenza-like symptoms	7.5 (0.1)	7.0 (0.1)
Pain	6.4 (0.1)	6.3 (0.1)
Fatigue	3.3 (0.1)	3.4 (0.1)
Cardiovascular disorders, general		
Edema	4.1 (0.1)	4.5 (0.1)
Hypertension	4.3 (0.1)	5.1 (0.1)
Central and peripheral nervous system disorders		
Headache	7.6 (0.3)	7.2 (0.2)
Dizziness	6.2 (0.2)	6.7 (0.3)
Gastrointestinal system disorders		
Abdominal pain	5.6 (0.7)	7.1 (1.0)
Dyspepsia	5.2 (0.6)	6.1 (0.7)
Diarrhea	4.5 (0.4)	3.4 (0.3)
Nausea	3.4 (0.5)	3.6 (0.4)
Metabolic and nutritional disorders		
Hypochloremia	4.0 (0)	4.4 (0.1)
Musculo-skeletal system disorders		
Arthritis	6.3 (0.1)	6.2 (0.1)
Back Pain	6.8 (0.1)	5.3 (0.1)
Platelet, bleeding & clotting disorders		
Purpura	5.3 (0.3)	3.7 (0.1)
Epistaxis	2.9 (0.2)	2.5 (0.1)
Psychiatric disorders		
Depression	3.6 (0.1)	3.9 (0.2)
Respiratory system disorders		
Upper respiratory tract infection	8.7 (0.1)	8.3 (0.1)
Dyspnea	4.5 (0.1)	4.7 (0.1)
Rhinitis	4.2 (0.1)	4.2 (0.1)
Bronchitis	3.7 (0.1)	3.7 (0)
Coughing	3.1 (0.1)	2.7 (0.1)
Skin & appendage disorders		
Rash	4.2 (0.5)	3.5 (0.2)
Pruritus	3.3 (0.3)	1.6 (0.1)
Urinary system disorders		
Urinary tract infection	3.1 (0)	3.5 (0.1)

Incidence of discontinuation, regardless of relationship to therapy, is shown in parentheses.

Other adverse experiences of potential importance occurring in 1% to 2.5% of patients receiving PLAVIX (clopidogrel bisulfate) in the CAPRIE controlled clinical trial are listed below regardless of relationship to PLAVIX. In general, the incidence of these events was similar in the aspirin-treated group. Autonomic Nervous System Disorders: Syncope, Paresthesia. Body as a Whole - general disorders: Asthenia, Hemia. Cardiovascular disorders: Cardiac failure. Central and peripheral nervous system disorders: Cramps, leg. Hypoesthesia, Neuralgia, Paresthesia, Vertigo. Gastrointestinal system disorders: Constipation, Vomiting, Heart rate and rhythm disorders, Flatulence anal. Liver and biliary system disorders: Hepatic enzymes increased. Metabolic and nutritional disorders: Gout, hyperuricemia, non-protein nitrogen (NPN) increased. Musculo-skeletal system disorders: Arthritis, Artralgia, Paresthesia, Bleeding & clotting disorders: GI hemorrhage, hematoma.

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You can help protect against the formation of clots and reduce your risk of a future heart attack or stroke.

This is important information if you've been hospitalized with heart-related chest pain or a certain type of heart attack. That's because these conditions, known as Acute Coronary Syndrome—or ACS—are usually caused when blood platelets stick together and form clots that block blood flow to your heart. And if you've already had a clot, you're at an increased risk for a future heart attack or stroke.

PLAVIX, taken with other heart medicines, helps provide greater protection against heart attack or stroke than other heart medicines alone.

That's because prescription PLAVIX works differently than your cholesterol and blood pressure medications, focusing on your blood platelets to help keep them from sticking together and forming clots.



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All the President's Men

A new book says Abraham Lincoln was gay. Was he, or did he just have some really close male friends?

By MICHELLE ORCINI

Lincoln's son was more of a son of John Ford movies, but in the 1850s, it was common for men to enter tenting, camping, building, heterosexual men to share a bed. Matthews were an indulgent, central figure in the tenting, private life of a traveling private soldier. Double bunking was so common that it rarely aroused questions of one's sexual orientation. But a book due out this week asserts that Abraham Lincoln engaged in the practice rather too often and too enthusiastically to avoid the conclusion that he was homosexual.

In *The Intimate World of Abraham Lincoln* (Free Press, 246 pages) sex researcher C.A. Tripp argues that the last years Lincoln kept in the same bed with his friend Joshua Speed when the two lived in Springfield, Ill., as bachelors far surpassed what was common or necessary. Tripp also cites accounts from Washington wags of that period who noted that the 16th President regularly shared a bed with David Derrickson, one of his guards, whenever his wife Mary Todd was out of town. Tripp throws in a handful of other bunkmates, Lincoln's barely veiled sense of humor and his stormy relationship with his wife to argue that the Lincoln bedroom was the site of behavior surprising from the founder of a party that wants to amend the Constitution to ban same-sex marriage. (Have the Log Cabin Republicans known this all along?)

But in assembling his data, Tripp is more persuasive in highlighting the rigidity of modern attitudes toward male friendships than in proving anything about Lincoln's sexuality. Supporters that Lincoln was gay have existed for years. In his 1926 biography, the poet Carl Sandburg wrote that the President and Speed possessed "a streak of lavender and spots soft as May

roses," a phrase that some now place that seems to suggest something unimpeachable.

Lincoln was by most accounts difficult to know; he struggled with depression and appeared more comfortable around men than women. But Tripp, who worked with United States in the 1960s and died in 2001 two weeks after turning in his manuscript, writes out sexuality in the most unobtrusive changes, so far as an 1841 letter from Lincoln to Speed after the latter refused to describe it.

It begins without a single personal term. Tripp inserts: "That dream is on a 1875 word account of a local murder trial. Hard to find anything less personal than that, yet it is precisely this kind of impersonal reporting of some irrelevant bit of news that is often resorted to by distraught lovers who are contending with some stress and who thus

choose to recount details from a neutral territory as they wait out a storm that swirls about them." About anything more is "circumventing, however, such as accounts by someone who saw the two having sex or expressions of carnal desire from Lincoln or Speed. It is hard to view the letter as anything other than a description of a murder trial."

In another instance, Tripp covers an excerpt from the diary of Virginia Woodbury Fox, a Washington socialite during Lincoln's day. Writing of evenings that Lincoln and Fox knew, she bemoaned together in the White House. Fox exclaims, "What Stuff!" To Tripp, the comment denotes shock at Lincoln's behavior, but it could just as easily be construed as disgust at his sex.

Most of Tripp's evidence is of a veritable standard. He does demonstrate the terms of the argument between Lincoln and Speed parting letters in which Lincoln wrote of his distress over their physical separation, but usually signed with "Yours honestly," not "Yours sincerely." But Anthony Rotundo, author of *Manly Men: Masculinity, Manhood, and the Modern Era*, says that such intimate communication was not

unusual for men at that time. Rotundo says it was socially acceptable for men before marriage to enjoy "romantic friendships" that involved serious affection and love as its male friendships today. "These were not relationships people had to hide," says Rotundo. He also points out that 19th-century men, the notion that someone would identify him or herself as homosexual had not yet developed, making it difficult to retroactively describe a 19th-century definition. "There was a spectrum of relationships," explains Rotundo. "You didn't have to say, 'I'm on this side or that,' as you do today."

And what if Lincoln was gay? Does it illuminate anything about his decisions as President? Tripp admits that even if Lincoln did hide his sexuality, we cannot assume it made him sympathetic to outsiders, thus that it was a factor in his decision to free the slaves. But he argues that Lincoln is "too central a figure in history to keep obscuring basic facts of his life." Unfortunately, Tripp attempts to show Lincoln was gay does little to set the record straight.

With reporting by Andrew Koppe, New York



The union between the President and Joshua Speed (left) and David Derrickson (right).

THE MEN IN ABE'S LIFE

JOSHUA SPEED

Friend. Shared a bed with Lincoln for four years; they later wrote affectionate letters expressing their concerns about marriage.

DAVID DERRICKSON

Bodyguard. Accounts from observers say the Army captain slept beside Lincoln when Mary Todd was out of town.

BILLY GREENE

Friend. Shared a bed with Lincoln in New Salem, Ill., and once observed that Abe's eyes were "as perfect as a human being could be."

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