ANNALS OF MEDICINE

THE OUTLAW DOCTOR

Cancer researchers used to call him a fraud. What's changed?

BY MICHAEL SPECTER

Ticholas Gonzalez, part Mexican, part Italian, all American, and very ambitious, grew up in Queens, attended New York City public schools, and graduated, Phi Beta Kappa and magna cum laude, from Brown University in 1970, where he majored in English literature. He then returned to New York and began a career as a journalist. Gonzalez had some early success, including a cover story in New York magazine, and he started to specialize in medical subjects. It didn't take him long to realize, however, that he would rather do it than write about it. He went to Columbia and signed up for the courses required to attend medical school. After that, he applied to Stanford, Yale, Johns Hopkins, and Cornell, among other places. He was accepted by them all.

"I thought about it for exactly five minutes," Gonzalez told me the first time we met, early last fall. "There really was no choice. I wanted to go to Cornell because it was affiliated with Memorial," by which he meant Memorial Sloan-Kettering Cancer Center, one of America's most important research hospitals. "In just a few blocks you have Memorial and Rockefeller and Cornell. It's the center of the world for cancer research. I wanted to study there, become chief of medicine, and work there for the rest of my life. That was the only goal I ever had."

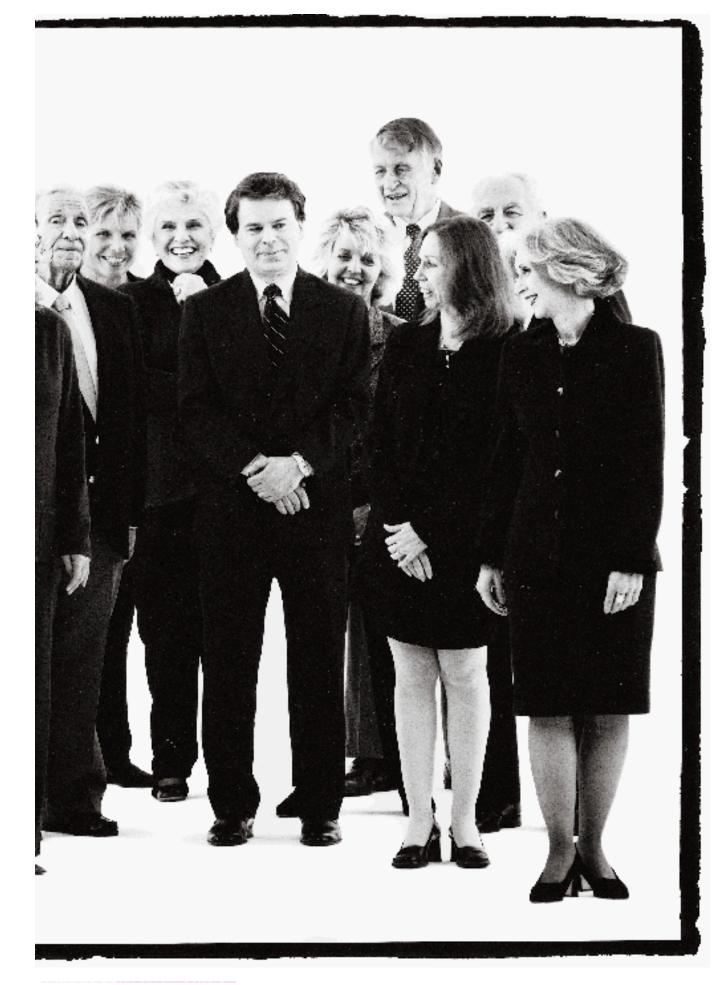
His career got off to a promising start. In 1980, Gonzalez apprenticed himself to Robert A. Good, a medical pioneer who had performed the first successful bone-marrow transplant in humans, and who was then president of Sloan-Kettering. Good encouraged students to follow their hunches, and Gonzalez, by the end of his second year in medical school, had developed one: he was fasci-

nated by the relationship between nutrition and cancer—an area of research thengathering momentum. A friend had awakened Gonzalez's interest by telling him about William Donald Kelley, an orthodontist from Grapevine, Texas, who over the previous twenty years had developed a staggeringly complex nutritional and metabolic approach to treating cancer. Kelley, who had studied biochemistry, became ill in 1963 and was diagnosed with pancreatic cancer. (No biopsy was ever made to confirm the diagnosis.) He refused standard care, treated himself, and got better. Gradually, Kelley took on other patients for whom conventional medicine seemed to offer little hope.

By the time one of those patients, the actor Steve McQueen, died of mesothelioma, in 1980, Kelley had become widely recognized as an authority on nontoxic cancer therapy. He had also become notorious—largely as a result of frequent, unequivocal claims he made that his nutritional approach could cure malignancies. That the right diet could help prevent certain cancers had been assumed for decades; treating the disease with nutrition alone, however, seemed reckless. Kelley was denounced by the American Cancer Society, which put his therapy on its unproven-methods blacklist. He was investigated by state, local, and federal authorities and vilified by them all. Cancer specialists viewed him as the definitive quack, a man who relied on remedies long since discarded by orthodox medicinesuch as coffee enemas, and enzyme pills that, he claimed, would "digest" tumors. Kelley was not at all what Gonzalez's professors at Cornell had in mind when they encouraged him to explore the links between nutrition and cancer. In fact, if the Food and Drug Administration had had

PHOTOGRAPH BY CHRIS CALLIS

Nicholas Gonzalez, with some of his patients, says, "You don't do chemotherapy and Gonzalez. You do one or the other." His treatments require diets, enemas, and pills.





"The suggestions are supposed to go in the box."

a Ten Most Wanted list, Kelley's name would surely have been on top.

"So I stumbled across this nut," Gonzalez told me, a rueful smile spreading across his face. "Crazy old Dr. Kelley. He was infamous. Kelley was from Texas, but he literally was forced to flee in the dead of night. They took away his dental license, and they put him in jail. Eventually, he settled in Washington state."

Kelley believed that a fundamental cause of cancer was the body's inability to control the growth of protein or to digest it properly, and he said this was due to an enzyme deficiency. He was not the first to make such a hypothesis. The laetrile movement, founded in the early fifties by Ernst T. Krebs, Sr., was based on an allied assertion: that a chemical found naturally in the pits of apricots could fight tumors. Like Krebs, Kelley rejected the common view that the immune system provides the first defense against cancer. Instead, he prescribed massive supplements of an enzyme normally produced by the pancreas, which he claimed should circulate in the bloodstream and break protein down as it appears there. Kelley also stressed the role of nutrition in treating cancer, saying that the genetic determinants of human

metabolism vary so greatly that a diet guaranteed to cure one man would rush the next to his grave.

By the time Gonzalez met him, in 1981, Kelley had nearly a thousand patients. He required them to complete nutritional surveys consisting of up to thirty-two hundred questions, and he offered his supplements through the mail. He also developed a complicated computer program that designed diets for each patient. Kelley considered daily coffee enemas essential to his treatment because, in his view, they would cleanse the liver and gallbladder, purging the body of bile, waste, and accumulated toxins. To help people comply, he even marketed a particularly strong roast, called Kelley Koffee. His book, "One Answer to Cancer," which became a sensation in the health-food-oriented nutritional underground, still enjoys a vogue on the Internet.

"It all seemed insane," Gonzalez told me. "I know that. But the idea of killing the cancer cells without also killing those that are healthy seemed interesting to me. So did the idea of focussing on nutrition. I had lunch with Kelley and I was skeptical. I was as tra-

ditional a medical student as you could find. I asked if he would let me look seriously at his research, and he told me to take any records I wanted, interview any patient. 'Look at this theory and see how it works,' he told me. 'Examine it carefully. After that, if you think I'm a quack go tell the world.'"

Kelley's willingness to open his books to outside scrutiny appealed to the journalist in Gonzalez. He still felt that Kelley was not quite sane—after all, he asked some of his sickest patients to eat nothing but raw foods and others to consume as much animal fat as possible. But Gonzalez decided to look into the medical histories of thousands of people that Kelley had treated with this discredited therapy.

At Sloan-Kettering, Good was all for it, reasoning that even if Kelley was a fraud the research could prove valuable. Gonzalez got to work, travelling to Dallas and then to Kelley's farm in the Cascade Mountains of Washington. What began in the summer of 1981 developed into a five-year study in which Gonzalez reviewed the records of every cancer patient who followed the Kelley regime between 1970 and 1982. He made contact with thirteen hundred and six people and interviewed four hundred and fifty-five of them. He eventually selected fifty for his study, all of whom had been diagnosed by well-regarded specialistsand not by Kelley. In the end, Gonzalez produced a three-hundred-page monograph, "One Man Alone," that describes in carefully documented detail the results of Kelley's treatment.

The manuscript was never published. "Kelley was a weird man and he was eccentric," Gonzalez said. "People considered him a quack. I understood all that, yet I had no choice other than to face the fact that he had hundreds of patients with obviously terminal disease who were still alive five, ten, and fifteen years later. It was there in the data, and to me, ultimately, data are the only things that can tell the truth."

Cancer specialists were not impressed. They argued that in some cases the patients' histories were inconclusive, in others any improvement might be attributed to earlier treatments. In fact, other researchers had experimented for years with therapies like those that Kelley had relied upon without success. Gonzalez was warned that his intel-

lectual curiosity was slipping over the edge into an obsession. It was too late, though: Gonzalez had become a true believer. He completed a fellowship in immunology in 1986, and the next year, when Kelley stopped seeing patients, Gonzalez made the only decision he felt was possible: he returned to Manhattan and opened an office.

Soon Gonzalez became as reviled as Kelley, whom he had come to consider his mentor. Labelled a charlatan and a fraud, Gonzalez was investigated and reprimanded in 1994 by the New York State medical board for "departing from accepted practice." He was forced to submit to psychological examinations and undergo retraining. In the past decade, he has lost two malpractice suits and has been denounced on national television. There have even been efforts to remove his license. Like Kelley, he prescribes coffee enemas twice a day. To assess each patient's "cancer burden," Gonzalez relies on a diagnostic testbased on hair analysis and a shaky method of measuring energy levels called radionics—that has been dismissed by conventional researchers as worthless. But Gonzalez has never stopped taking patients.

"There is really only one truth,"Gonzalez told me. "Either cancer patients get better with my treatment or they do not. And, if they do, I could not care less whether it involved moon dust or microbes from Pluto. What matters is that many-not all, by any means-of my patients are alive when they should be dead. And what has that made me in the eyes of the traditional cancer establishment? Simple. I am Gonzalez, the quack, the fraud, the doctor who lies to cancer patients, steals their money, and kills them. If there was a signup sheet at N.I.H. to run me down with a truck, people would stand on line for hours."

Nicholas Gonzalez is a burly, pastyfaced man of medium build and moderate height with a helmet of thick brown hair that juts out over his forehead. He wears suits and perfectly knotted silk ties, yet he gives off the appearance of somebody whose only exposure to natural light comes during his morning walk to work. Gonzalez, who is fiftythree, was once married, to his partner in the practice, Linda Isaacs, but since their divorce, in 1993, work occupies all his time. There is an air of intensity about Gonzalez which often makes him difficult to be around. He is not cold, or unusually defensive, but I have met few people more single-minded.

Gonzalez grew up in a family of artists. His grandfather Guillermo was a famous cellist in Mexico, who fought with Pancho Villa's army. Eventually, he moved to New York and performed with the Metropolitan Opera. By the time Gonzalez was six, he told me, he could "hum all the major themes from the Bach violin concertos." Yet as an adult he has been consumed by medicine. Gonzalez has no hobbies, no children, few interests other than cancer and nutrition. That obsession, he told me, ended his marriage. (He and Isaacs work amicably together, and she has since remarried.) I once asked Gonzalez if he thought it odd that a man who tells his patients that the only healthy life is a balanced life could do nothing but work. "My life is the life style I would choose for nobody," he replied. "I used to go to movies and restaurants. I've had brunch and gone to museums and taken vacations, but when I accepted this responsibility everything else became secondary. I don't want to do anything else. I have nothing against people who have normal lives. I am just not one of them."

He and Isaacs work out of an unremarkable medical building in midtown, across the street from the Morgan Library. The offices have a spare, airy feel, like a New Age spa, with wide floorboards and framed pictures of waterfalls. Gonzalez and Isaacs treat about six hundred people, and reject many more patients than they take. Some of those Gonzalez turns away are in the early stages of cancers for which there are accepted treatments, but most are too close to death to be helped. For legal as well as ethical reasons, he rarely treats such people. Because insurance companies won't cover his program, Gonzalez's patients are required to come up with about eight thousand dollars a year to cover the costs of the many supplements they will take each day for the rest of their lives.

Although he has been portrayed as a medical ideologue, Gonzalez has never explicitly rejected the more orthodox precepts of his profession. On the other hand, he never apologizes for what he does, which is to treat the deadliest can-



"Someday, you may thank me for breaking what was becoming, in this family, a vicious cycle of inheritance!"

cers in ways that no conventional doctor ever would. "This is not about magnets, massage, oils, echinacea, or some other voodoo," he told me. "I am offering a primary treatment for major cancer. You don't do chemotherapy and Gonzalez. You do one or the other. I have been referred to as the doctor of last resort—and perhaps I am. But I am not in hiding, not in Mexico. If my results work, they work. If not, I'll walk away."

Almost alone in the world of alternative practitioners, Gonzalez insists that he wants his research evaluated independently, by the best scientists. Until recently, most doctors had been unwilling to spend the time. Yet something strange has started to happen: the medical outlaw is suddenly in demand. Doctors who used to shun him now sometimes refer patients. His work is discussed without condescension in such mainstream publications as the *Journal of the National Cancer Institute*.

Gonzalez's persistence is clearly one reason for this new legitimacy. Politics is another. In 1999, Gonzalez received \$1.4 million from the National Institutes of Health to compare his enzymenutritional therapy with the best chemotherapy now available for the treatment of advanced pancreatic cancer. As a percentage of the fifteen billion dollars that the federal government spends on medical research annually, the grant amounts to what one federal health official described to me as "decimal dust." In fact, the Gonzalez grant is not even the largest sum doled out recently by the National Center for Complementary and Alternative Medicine, a federal institute that Congress created in 1998 to assess the stupefyingly large armamentarium of novel and untested treatments that now play central roles in American health care. Simply by funding the Gonzalez trial, however, the N.I.H. has turned it into the most significant investigation of an unconventional cancer treatment yet sanctioned by the federal government.

The American public's desire for new ways to treat everything from chronic pain to degenerative diseases has turned alternative medicine into a force so potent that no medical institution of any significance—not even the National Institutes of Health—can afford to ignore it. Last year, the Dana-

Farber Cancer Institute and Harvard Medical School, its equally conservative affiliate, even competed for the right to house a new department of integrative medicine. Harvard won, to the regret of some of its faculty.

It has become routine for patients to demand treatments based as much on anecdote and rumor as on science. They ask about energy healing and all manner of oddball supplements that they have found on the Internet. There are few data to prove that most popular home remedies, such as echinacea and St. John'swort, are safe, let alone effective. But the absence of certainty has created a vague new zone of possibility, and what was once considered a touchstone for fake science is now a fundamental fact of American public health. The movement had always been filled with fringe figures like Kelley, but there is no longer anything "fringe," or even alternative, really, about alternative medicine.

Americans spent twenty-seven billion dollars on unproven remedies in 1997, and are expected to spend much more this year. One study, published in the Journal of the American Medical Associa tion, by David Eisenberg, who is now director of Harvard's Center for Alternative Medicine Research and Education, found that forty-two per cent of American adults have used some form of untested therapy. Gonzalez is one of the most visible beneficiaries of this new willingness to look beyond the borders of scientific method. His study, which is being carried out by the Columbia College of Physicians and Surgeons, will examine patients with a form of pancreatic cancer which, in most cases, is swiftly fatal.

Gonzalez first presented a selection of his cases to the National Cancer Institute in July of 1993, at a conference in Bethesda. Officials suggested that he organize a small pilot study. Gonzalez enlisted the late Dr. Ernst L. Wynder, who was the president of the American Health Foundation and is often credited with providing the first compelling evidence that smoking causes cancer.



Wynder helped Gonzalez look for funding, and eventually he found it at the Nestlé company, which, as the world's largest food conglomerate, has a significant interest in exploring the links between nutrition and disease.

Gonzalez and Linda Isaacs followed the progress of eleven patients with advanced pancreatic cancer. (They compared them with twelve others, each of whom they saw once but who did not choose to participate in the program.) The patients in the study had been diagnosed before Gonzalez met them; the cancer was confirmed independently by board-certified pathologists, verified by specialists hired by Procter & Gamble, which supported the study, and finally reviewed by oncologists at Columbia. ("We knew from the start that we would be attacked for our approach,"Gonzalez told me. "So we deliberately detached ourselves from diagnosing these patients. I never even met the pathologists who read the slides.") Pancreatic cancer is the fifth-leading cause of cancer death in the United States. The five-year survival rate is four per cent, and more than eighty per cent of patients die in the first year. In the largest study carried out by the National Cancer Institute, none of the hundred and twenty-six participants—all with late-stage pancreatic cancer treated by conventional chemotherapy—lived longer than nineteen months.

The Gonzalez patients did much better, and in 1999 he and Isaacs published the data in the peer-reviewed journal Nutrition and Cancer. The results, though obviously not definitive with such a small number of patients, were hard to ignore. The average patient receiving the best conventional care for advanced pancreatic cancer survived less than six months; the median survival time for the Gonzalez patients was seventeen months. Two of his patients lived for four years and one for almost five. In an editorial that accompanied the article, Wynder and a colleague warned that the study may have suffered from selection bias (which can happen when researchers knowingly or unconsciously include their most successful or compliant patients, thus skewing the results). But the authors added that it was time somebody looked seriously at therapy that came from outside "the constraints of mainstream science."

The results surprised many of those

who saw them, including John Chabot, who is the vice-chairman of the department of surgery at Columbia Presbyterian, and a principal investigator of the federally funded study of Gonzalez's research. "Frankly, when I first read about it, I said, 'That can't possibly work,' "Chabot said. "Then I read the pilot data . . . and said, 'There really might be something there.' I had to come to grips with it myself. I have no idea how or why it might work, but the data are compelling enough that I can't ignore it."

It is an unpleasant fact that the Gonzalez trial should produce fairly rapid results. Because pancreatic cancer kills people so quickly, it should not take long to conclude with statistical certainty whether one group has benefitted more than the other (although even a successful outcome will not fully explain how the Gonzalez regimen works). The trial will follow between seventy and ninety patients, half of whom will be treated under the supervision of Dr. Chabot, at Columbia, and receive the best drugs and hospital care available. The others will be placed on the nutrition regime, and be treated by Gonzalez and Isaacs in their office.

"Some people wonder what on earth we are doing," Jeffrey D. White told me when I went to see him at the National Cancer Institute, where he is director of the office of cancer complementary and alternative medicine. "They say that by investigating a therapy they think is useless we are giving it a special legitimacy. Others are afraid that we will sacrifice the rigors of the scientific method. I understand those fears—we care about scientific method absolutely.

"But Dr. Gonzalez has really been more aggressive at attempting to get his work properly evaluated than any person I have ever encountered. He has some interesting data. Perhaps it will lead to something useful, and perhaps it will not. That is why we do trials. I do know this, though. If you are unwilling to evaluate something promising simply because it seems to come from left field, then there is nothing new you will ever try."

"Of all the millions of animal species that have ever lived, can anyone name another that cooks its food?" Gonzalez asked during a recent lecture in which he described his nutritional theo-



"You have creepy peasants."

ries in detail. "We are the only species in the history of the world that has done it. It tastes better. If you give animals cooked or raw food, they will always go for cooked. But what does cooking do to food? Food contains minerals and vitamins. Vitamins are mostly heat resistant. The one thing you do destroy when you cook food is enzymes.

"What are enzymes?" he went on. "They are catalysts. They enable chemical reactions to occur. There are reactions in the human body that would take ten thousand years if it were not for catalysts. Enzymes allow them to occur swiftly and efficiently at temperatures that allow us to live." Gonzalez is convinced that without enough of those enzymes we would almost all develop cancer.

During the eighties, while studying Kelley's nutritional theories, he came across the work of the early-twentiethcentury Scottish embryologist John Beard.Beard was fascinated by the placenta, which connects the blood supply of the mother, carrying nutrients and oxygen, to the blood supply of the embryo. Beard noticed that placental cells (called trophoblasts), early in their development, looked like cancer cells—and behaved like them, too. At some point during this early period, however, the trophoblasts stopped growing in the aggressive, uncontrolled way that is the hallmark of cancer.

What, he wondered, could turn a cell that was growing like cancer into a cell that was growing normally? Beard spent years trying to figure it out; nothing made sense until he realized that on the very day the cells stopped growing so rapidly the fetal pancreas began to secrete enzymes. In an adult, the pancreas releases enzymes into the small intestine to aid in digestion. But Beard hypothesized that the principal reason the fetus produced those en-

zymes was to control the growth of the placenta. Beard believed that one enzyme in particular, called trypsin, was created solely to destroy trophoblasts—and when he injected it into mice it reduced the size of their tumors. If the pancreas failed to generate enough of these enzymes, Beard wrote, the trophoblasts would circulate through the body of both mother and infant, making them vulnerable throughout their lives to cancer.

By 1911, the year Marie Curie received the Nobel Prize for her discovery of how radiation worked, and long before DNA was identified, biologists had largely come to a consensus that cancer resulted from some fundamental damage to cells. That same year, though, Beard published "The Enzyme Treatment of Cancer and Its Scientific Basis," in which he argued that radiation has nothing to do with the cure of cancer and that "it may be that many surgeons would rather themselves die of cancer than admit the truth."Gonzalez repeated similar sentiments to me on several occasions, and he has adopted as a first principle Beard's view that pancreatic enzymes can keep most tumors in check. It is a position many researchers find absurd, since most enzymes entering the bloodstream quickly dissolve into the amino acids that form them. Other scientists have tried, and failed, to find any anti-cancer effects associated with the use of orally administered pancreatic enzymes. Gonzalez claims that conventional doctors don't know what they are doing. "I was taught in physiology that oral enzymes are worthless," Gonzalez said. "And most of my former colleagues will go to their death believing that. They are simply wrong."

Relley divided humans into dozens of radically different body types and argued that their genetic destinies were the result of millions of years of varied selection pressure. Gonzalez has refined those categories and reduced them essentially to three. "It is absolute insanity to suggest that the whole human species, as different as it is, could be put on one diet," Gonzalez said. "The human species occupies every ecological niche from the Arctic Circle to equatorial rain forests. Eskimos, for example, subsist mostly on fat and red meat. Other groups have evolved to depend almost entirely on

their dairy herds, while other groups are vegetarians." Gonzalez says that giving low-fat vegetarian diets to people whose genes require them to eat meat makes about as much sense as raising a lion on hay.

"Despite the considerable media antagonism to animal fats and red meat in general," Gonzalez writes in the instructions to one of his diets, the Moderate Carnivore, "patients such as yourself do best if they include fatty red meat and other animal proteins in their diet at least two times a day." Eskimos provide his favorite cautionary tale. "They have no growing season," Gonzalez said. "They have no fruits. They have no vegetables. The only Eskimos that could survive are those that eat a high-fat, high-protein diet: Yet they are an incredibly hardy group of people, nearly devoid of heart disease, cancer or diabetes." Or, at least, they were.

As Gonzalez tells it, everything was fine for Eskimos when they were eating what he describes as their "factory specification" diet, to which they have adapted over thousands of years. But in the past few decades carbohydrates have been added to the mix. "These were among the healthiest people in the world until they switched their diet to a Western one," he writes. "When they cut their saturated fat consumption from 80 per cent to 40 per cent, they began to develop our pattern of degenerative diseases. For them, fat was the perfect fuel."

People who hope that the Gonzalez regime might offer a simple solution to a terrible illness will be disappointed. It is a gruelling program, requiring each patient to swallow up to a hundred and fifty pills a day, as well as to adhere to a rigid diet and detoxification routine:enemas, liver flushes, and whole-body purges with psyllium husks, which Gonzalez refers to as "the clean sweep." Each day, he follows the regime himself, as a preventive measure, including the two coffee enemas, and he carries his pills around in little Ziploc baggies that poke out of the top of his shirt pocket.

Patients normally take the pills for fifteen days, then flush their systems for five days. This cycle is repeated continually. "People ask me if they need to stay on the program after they feel better," Gonzalez told me, "and I tell

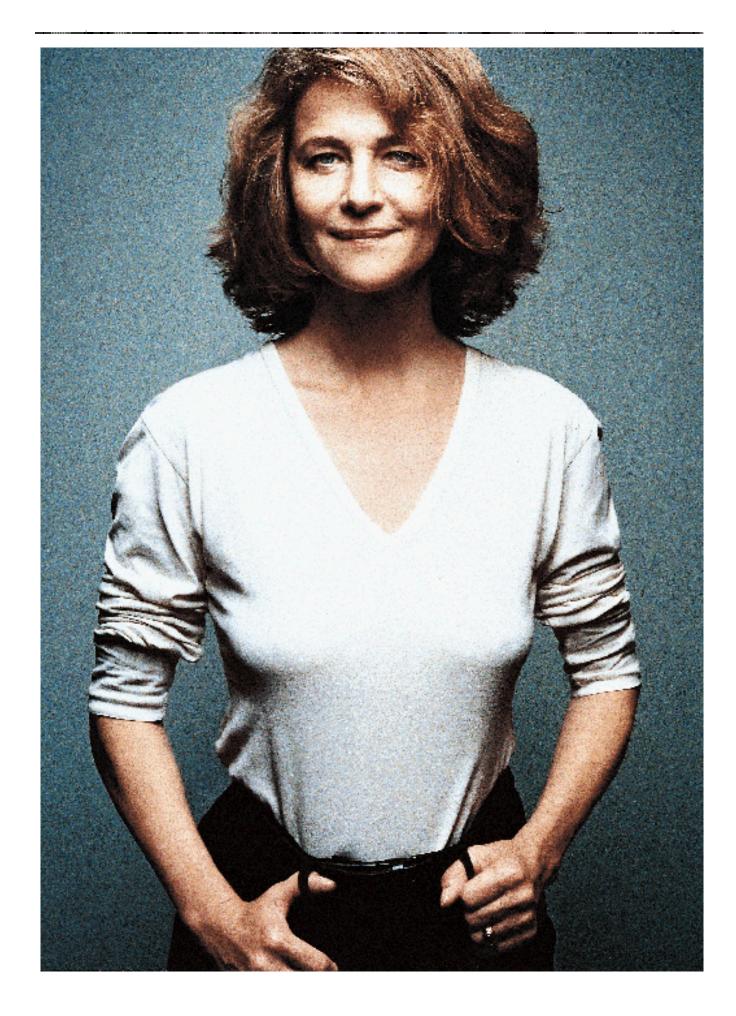
SHOWCASE BY WILLIAM KLEIN

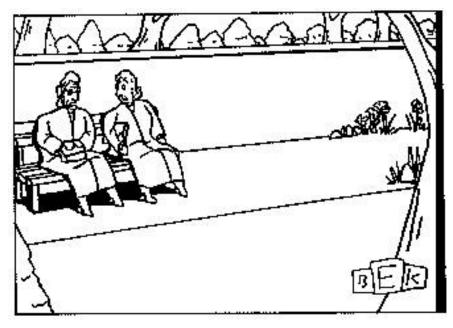
ROLE REVER*S*AL

t fifty-four, the British actress A Charlotte Rampling is, in the polite language of media publicists, "making a comeback." She has the leading role in "Signs & Wonders," a psychological thriller directed by Jonathan Nossiter, which opens next week. The truth is that Rampling never went away; many of her recent movies just didn't register on America's glitz radar. And she has lately taken on the sort of supporting role to which actresses are relegated once they reach a certain age—Aunt Maude in "The Wings of the Dove," and Miss Havisham in a BBC adaptation of "Great Expectations." But Rampling has made more than forty movies since she played Lynn Redgrave's sexually feckless roommate in "Georgy Girl," in 1966. Although her career trajectorywhich includes "The Ski Bum" and "Orca: Killer Whale"—has been as unpredictable as her famously neurotic personality, her melancholy beauty and steel-gray eyes have long been imprinted on the collective unconscious of moviegoers.

Women who lead with their damaged psyches have been Rampling's specialty: the unbalanced actress in Woody Allen's "Stardust Memories" (who inspires the compliment "I think they've been putting something wonderful in your lithium");the Holocaust survivor in "The Night Porter," who resumes a sadomasochistic relationship with a former S.S. officer; the boozy, desperate girlfriend of Paul Newman's down-and-out lawyer in "The Verdict," who is ultimately repaid for her betrayal with a sensational slap across the face. This time, however, she is not the storm but the calm at its center: a woman who remains unflappable even as her husband becomes involved in an increasingly dangerous affair.

taır. —Emily Nunn 🖰





"It was an incredible journey, but a crappy life."

them only if they want to stay alive." The list of supplements that Gonzalez hands out to most patients with solid tumors runs to four single-spaced pages. It includes, in part, sixty freeze-dried, porcine-pancreatic enzyme pills (swallowed in six batches, all of which must be taken with water, and none of which may be taken with food or within an hour of a meal). During breakfast and dinner, each patient must swallow capsules of adrenal medulla, amino acids, bone marrow, selenium 50, thyroid, Vitamin A 10,000, and Vitamin E succinate.

There are separate pills for the lymph, liver, and kidney—all to help balance deficiencies caused by lack of enzymes, or because the body is overwhelmed fighting cancer. During lunch, each patient must take a pill with twenty-five thousand units of beta carotene, as well as pills with copper gluconate, manganese glycerophosphate, potassium citrate, and Vitamin D. Twice each day, whenever it's convenient, patients must dilute a mixture of black-walnut formula in water and drink it. Patients who suffer from metal toxicity also need to take nine pills of sodium alginate.

Critics have singled out the coffee enemas for particular ridicule. "I respect his willingness to have his regime studied," Barrie R. Cassileth, a medical sociologist who is chief of integrative medicine at Sloan-Kettering, told me. Cassileth has published some of the most influential articles demonstrating how important alternative therapies and supplements have become. "But the coffee enemas are ludicrous," she said. "He ought to just get rid of them." I found no conventional physician who disagreed.

Gonzalez is fully aware that the enemas are a source of hilarity, disbelief, and even outrage. Over the past few months, he supplied me with a stream of data suggesting that coffee enemas may have been used on the battlefields of Crimea by Florence Nightingale, and he provided me with correspondence that noted that, until the nineteen-seventies, they were included in the Merck Manual, which is the medical doctors' therapeutic bible. "I'm no different from anybody else," he said. "When Kelley started talking about detoxification, I thought he was lapsing into mysticism. At his insistence, though, I did the first one in the bathroom of his Dallas office. And do you know what? I felt better instantly, and I've continued to do them since."

Nost of Gonzalez's patients consider his diet even more demanding than the pill regime. For people with pancreatic cancer, Gonzalez prescribes a diet he refers to as the Moderate Vegetarian Metabolizer. It forbids red meat or

poultry, because, he claims, digesting them consumes too many of the body's precious pancreatic enzymes. Moderate vegetarian metabolizers are encouraged to eat raw fruits, grains, rice, sprouts, nuts, and seeds and to drink great quantities of fresh vegetable juice. They are also allowed a small amount of fish, eggs, and yogurt for their protein.

There is obviously a profound faith required of those wishing to sign on with Gonzalez. "Are you keeping to your diet?" Gonzalez asked LouElla Merin one morning while I was in his office. Merin is a fifty-nine-year-old bereavement counsellor, with a mop of frizzy hair, who first visited Gonzalez on June 7, 1991, after having been diagnosed with breast cancer. Although at least half of his patients also see more conventional physicians—in part because insurance companies will not reimburse the cost of tests if he orders them— Merin has never been tempted. "I didn't go the orthodox route, because I believe it's burning and poisoning, and it's lethal," she told me. "Why put myself through that?"

We were sitting in Gonzalez's office; the venetian blinds were drawn, and it was dark despite the early hour. I asked why she was so sure that more traditional methods of treating breast cancer—surgery, chemotherapy, radiation—wouldn't have helped. After all, I pointed out, Gonzalez has published just a single paper with data on pancreatic tumors; there is no clear evidence that, even if the results of that initial study are confirmed, enzyme therapy works as well for any other cancers.

"You hear something horrible is going to happen to you and you have to put your faith in something," she said. "And this is where I put it. The treatment made more sense for me than those poisons. It's not like this is fun, you know. But he is a special man, and I trust him." At this point, Merin turned and smiled at Gonzalez, who had said nothing during our conversation. "He is more like a therapist at times—first the man helped save my life and then he changed it. . . . I hug you, I kiss you, I embrace you," she said, blowing him a kiss. Gonzalez is not a sentimental person, but his face flushed even though he acted as if he hadn't heard her.

"Have you been good?" he asked her.

"Are you doing everything you are supposed to do?"

"I'm a ninety-eight-per-center," Merin said, with a soft laugh. "For a half-Italian woman, to have lived nine years without a cannoli-well, that's a sacrifice. But I'm alive. And I plan to stay that way." He asked about her latest hair test. Hair testing is the least comprehensible part of his treatment program. Yet Gonzalez believes in it completely; he sends locks of patients' hair to a self-trained technician in Louisiana, and she analyzes them using a method that he concedes he does not understand. Using the results of such tests, Gonzalez claims that he can gauge the severity of cancer and the vitality of many organs. "I know the data for hair testing are shaky, and that people think it's nutty," he said. "But my answer to the critics is: I don't need it. For the Columbia study, we are not even using it. It is a diagnostic tool. We have tried to fool it many times, and we have always failed. I know it works."

Gonzalez has resisted frequent appeals to set up satellite clinics in other cities; he has also declined to train physicians. Before that happens, he wants the approval—or at least the acceptance—of the medical establishment. "After the trials are over and the people up there"—he pointed vaguely in the direction of the Upper East Side triangle of cancerresearch hospitals—"agree that this is a valid approach, then I will train any doctor and I will make my supplements available. I'll even train doctors at Sloan-Kettering," he said with a mischievous grin. "It would be my pleasure."

fter leaving Gonzalez's office one Aday, I wandered up Madison Avenue in search of a vitamin store. I didn't have far to go, because in New York, as in most American cities, there are health-food shops and vitamin outlets on virtually every block. It has become as easy to buy a bottle of acidophilus, St. John's-wort, or ginkgo biloba as it is to pick up a bagel. There are more vitamin shops, at least in Manhattan, than Starbucks. Ten years ago, a pharmacy offered a small assortment of vitamins, often tucked onto a back shelf; today, those same stores are crammed with unguents, crystals, oils, and balms, all promising near-magical benefits.

Gonzalez is nevertheless skeptical

about the quality of most vitamins and supplements. "You can buy every pill in every store," he said. "But pills that are called enzymes don't always have enzymes in them—let alone active enzymes in the right formulation. Walking into a vitamin store is a complete crapshoot."

I decided to take a chance, however, and headed off to the nearest G.N.C. There were big cardboard signs to mark each major section: Lifestyle, ScanDiet Weight Management, Preventive Nutrition, Vitamin E & Aminos, and several others. I had been talking to Gonzalez about garlic, and I asked a woman behind the counter if she had garlic pills. She laughed and pointed over my shoulder. There were dozens of bottles, packed in rows along four shelves. The merits of garlic have been recorded since the time of the pharaohs; it seems to have a beneficial effect on cardiovascular health and on immune status; it may reduce low-density lipoprotein, which is the bad type of cholesterol.

I wasn't really sure what to look for, so I asked the saleswoman. She came over, grabbed a bottle, and handed it to me. "This is great," she said. "It'll clear you right up." The label said that it was Garlinase 4000. "What about this?" I asked, holding out a bottle with the brand name of Garlicin, which was next to it. "I don't know," she said, walking back to

the cash register. "They are all about the same." If so, I wondered why nearly every G.N.C. also carried Kyolic Garlic Plus, Potent Garlic, Super Garlic, Coated Odorless Triple Garlic, Triple Garlic Plus, Garlic 6000, and Ultimate Garlic, among others.

The garlic display was not nearly so impressive as the selection for ginseng: White Ginseng Root, Siberian Ginseng Root, Ginseng Royal Jelly, and Ginseng Powermax 4X were all available, among many other varieties, each in a range of brands, potencies, capsules, and bottle sizes.

After leaving G.N.C., I went straight to the office of Marion Nestle, the chairman of the department of nutrition and food studies at New York University, and a principal contributor to Surgeon General C. Everett Koop's 1988 "Report on Nutrition and Health." She laughed when I told her what I had experienced. "There's no way to tell if these pills even contain allinase, which is the enzyme in garlic that is most likely to be beneficial," she said. "Half the adult population of the United States is putting this stuff in their mouths. It really does present the biggest challenge we have had in years to the way medicine in this country is practiced."

The term "vitamins" came into common use only in the nineteen-twenties; before that, the idea of pills contain-



"Good luck with your lecture, Eric—they're loaded for white male."

ing nutrients was unknown. Once such pills appeared, however, their success was immediate, and by 1922 the American Medical Association felt compelled to describe the hype surrounding the products as a "gigantic fraud." It took a national tragedy—the poisoning of a hundred and seven persons, caused by the use of an elixir of sulfanilamide, in 1937—to persuade Congress to pass the Food, Drug, and Cosmetic Act. That law finally granted the Food and Drug Administration the authority it needed to regulate such products. Over the past thirty years, however, as medicine has become more advanced, technical, and monolithic, consumers have grown suspicious, even hostile. People treat their doctors like car salesmen, and many Americans now insist on making health-related decisions for themselves. That has made for more knowledgeable patients, but it has also caused tremendous conflict. In 1993, with supplements of dubious quality and unknown contents flooding the market, the F.D.A. attempted to impose order, proposing to classify many herbs and amino acids as drugs.

As a matter of science policy, the decision made sense. Politically, it was a disaster. The supplement industry launched a withering campaign, telling consumers that unless they moved quickly the federal government would limit their right to buy vitamins—a preposterous claim. Mel Gibson, a self-professed health nut, appeared in the most effective of the advertisements, which was set in a murky future. Gibson played a man whose house is invaded by a SWAT team seeking to confiscate his illegal stash of Vitamin C.

Congress responded immediately. In 1994, it passed the Dietary Supplement Health and Education Act, which classified botanical and herbal supplements as foods, not drugs. Manufacturers no longer have to demonstrate that their products work, or are safe; they are not even required to report adverse effects to the F.D.A. False advertising is rarely punished, and the result is on display in every vitamin store in the nation. Some things are forbidden, of course. It is not acceptable to say that pills like chondroitin or glucosamine will cure arthritis, but there is nothing wrong with

THIS HAPPENED

A student, a young woman, in a fourth-floor hallway of her *lycée*, perched on the ledge of an open window chatting with friends between classes;

a teacher passes and chides her, *Be careful, you might fall*, almost banteringly chides her, *You might fall*, and the young woman, eighteen, a girl really, though she wouldn't think that,

as brilliant as she is, first in her class, and *Beautiful, too*, she's often told, smiles back, and leans into the open window, which wouldn't even be open if it were winter,

if it were winter someone would have closed it (*Close it!*), leans into the window, farther, still smiling, farther and farther, though it takes less time than this, really an instant, and lets herself fall. *Herselffall*.

A casual impulse, a fancy, never thought of until now, hardly thought of even now . . .

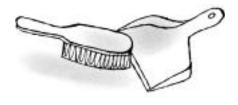
No, more than impulse or fancy, the girl knows what she's doing, the girl means something, the girl means to *mean*,

because, it occurs to her in that instant, that beautiful or not, bright yes or no,

she's not who she is, *she's not the person she is*, and the reason, she suddenly knows,

claiming that they "help support healthy joints." A company cannot say that bilberry cures "heart disease," but it can assert that the plant "keeps your arteries clean," or prevents them "from being narrowed." It is against the law for any firm to state explicitly that it has a treatment for Alzheimer's disease, but all are welcome to claim, without a shred of proof, that they sell supplements that "help mental functioning or memory."

In the six years since the law was enacted, supplement sales in the United States have grown from ten billion dollars a year to more than fifteen billion dollars. The law has led to thousands of new products, and the F.D.A. has not banned a single supplement since it was passed. That doesn't mean the products are safe. The herb A. fangchi, for instance, has been associated with urothelial carcinoma, yet it is for sale everywhere. Among other well-documented



examples of herbs producing adverse reactions are germander, which has been associated with acute hepatitis; comfrey, with hepatic veno-occlusive disease; and ephedra, with death from cardiovascular causes. Several studies have suggested that St. John's-wort can alleviate some symptoms of depression, but others have shown that it can drastically reduce the effectiveness of prescription drugs. Last year, the F.D.A. even issued a health advisory on St. John's-wort. But that action was unusual. It is never easy to prove that a drug causes adverse effects, even with those medicines which have been carefully evaluated. Since there are few regulations, nobody really can say what is in many herbs or botanical pills, or how they might interact with even the most benign medicine.

Marion Nestle, at N.Y.U., argues that the surge in alternative therapies reflects a pervasive disillusionment with the medical system, which is increasingly seen as capricious and inexact. "Medicine is about money now, and people have the feeling that doctors and hospitals are not really there to help you," she said. "Everyone has a horror story in the age of H.M.O.s. And it's not a class thing—

is that there's been so much premeditation where she is, so much plotting and planning,

there's hardly a person where she is, or if there is, it's not her, or not wholly her,

it's a self inhabited, lived in by her, and seemingly even as she thinks it she knows what's been missing: grace, not premeditation but grace, a kind of being in the world spontaneously, with *grace*.

Weightfully upon me was the world.

Weightfully this self which graced the world yet never wholly itself. Weightfully this self which weighted upon me,

the release from which is what I desire and what I achieve.

And the girl remembers, in this infinite instant already so many times divided,

the sadness she felt once, hardly knowing she felt it, to merely inhabit herself.

Yes, the girl falls, absurd to fall, even the earth with its compulsion to take unto itself all that falls

must know that falling is absurd, yet the girl falling isn't myself, or she is myself, but a self I took of my own volition unto myself. Forever. With grace. *This happened*.

—C.K. Williams

even rich people have trouble with them. Then you look at the herbal stuff. It's a completely different scene. The message is friendly. It's cheap, it's easy, so already that makes you feel better. People see these herbs that have been around for thousands of years, and they think these things are natural. They wonder how could they possibly be bad?"

Tearly thirty years after Richard Nixon began America's war on cancer, the rate of new cancers in the United States started to fall in the nineties—owing largely, it appears, to the emphasis placed on prevention and education. Yet at least a million Americans will be diagnosed with cancer this year, and about half as many will die of the disease. Cancer statistics are often difficult to evaluate, but so is the evidence of therapeutic success. The "cure rate," discussed in many studies, for example, measures whether a patient has survived for five years. If a person lives one day longer, the National Cancer Institute could consider him cured. "A lot of people happen to die in the sixth year," Gonzalez said. "Ask their families if they were cured."

Treatment with surgery, radiation, and chemotherapy often succeeds, but even the most optimistic cancer specialists would agree with Gonzalez that once a tumor has spread beyond its original site it becomes hard to extend life or to improve it; gemcitabine, for example, which is costly and debilitating, increases the life expectancy of a pancreatic-cancer patient from four and a half months to 5.7 months. Yet it is offered routinely because no physician likes to feel helpless. Still, even in those cases, like pancreatic cancer, where progress has been limited, oncologists tend to put their faith in molecular biology rather than in Gonzalez's treatment.

"I have been involved in the management of, I guess, twenty-five hundred people with pancreatic cancer over the past twenty-five years," Murray Brennan told me when I went to see him in his office at Sloan-Kettering, where he is chairman of the department of surgery. Brennan, a sixty-year-old New Zealander, has taught at Cornell medical school for nineteen years, and in 1983 Nicholas Gonzalez was among his many students.

"I admire Gonzalez's commitment,"

Brennan continued, "and God knows we don't have all the answers. But I have never seen anybody's tumor respond to pancreatic enzymes. *Not one time*. So I welcome this trial. If he has something we have overlooked, it would be thrilling. But when people talk about his 'success' I wonder what they mean, because as far as I can tell it is based on ten or eleven people. I don't mean to be unkind or unfair, but ten people is not enough to change the way a nation does business."

"At some point, the idea that you would take a knife and cut someone in half will be seen as truly barbaric,"Brennan went on. "That is obviously one of the reasons the alternative movement flourishes. But there is something else going on. Every day, my patients pick up the newspaper, and they are told that we are on the precipice of curing all medical afflictions faced by mankind—that the human genome will do it, or that something a person tried in a lab might end cancer in five years. In two generations, or ten, those miracles may come true. The problem is I am living now, and now it turns out that surgery saves the lives of more cancer patients than anything else by far. Advocates don't always accept this, but I am afraid we are doing the best we can."

urray Brennan is a carefully spo-Murray Bicinian is a con-ken, if blunt,man, but he stumbled over the word "advocates." Activists for specific diseases from AIDS to Alzheimer's have placed illness prominently on the political agenda. When it comes to determining the direction of scientific research, a congressional hearing has become as important as anything that might show up in a test tube. As a cause of death, AIDS ranked seventeenth last year in the United States, yet it received more money per patient from the N.I.H.—a total of two billion dollarsthan any other illness. There are defensible reasons for that; the research needed to understand how such a complex virus insinuates itself into the machinery of the immune system has already proved valuable, and will almost certainly be used in ways that cannot be predicted. If not for a powerful lobbying organization, however, that much money would never have been allocated for AIDS.

Representative Dan Burton, an Indiana Republican who has supported Gonzalez, regularly attacks federal researchers for not being more sympathetic to the use of popular, unproven remedies. (He also argues, with no reasonable evidence, that vaccinations may do more harm than good.) Testifying before Burton's Committee on Government Reform has become a painful ritual for the nation's senior scientists, who are often forced to explain why lengthy drug trials make sense. Under the rules of science, new substances need to be compared with standard therapies, and that can take years. Once something is on the market, however, testing becomes immensely more complicated. How do you assess the value of supplements, like valerian or Cat's Claw, that millions of Americans take every day? With so many people using ephedra or saw palmetto, not to mention combining more common supplements like Vitamin C and Vitamin E in ways that may have unexpected side effects, it may no longer always be possible to proceed as deliberately as many scientists would prefer.

Such concerns are constantly on the minds of the officials at Columbia University who have agreed to sponsor the Gonzalez trial, and the debates there about it were intense. Some researchers, deeply reluctant to move forward with the project, argued that the very participation of such a prestigious medical center would send a profound, and perhaps unwanted, message about the direction

of federal cancer research in America.

The prospect clearly worries Karen Antman, the chief of Columbia's division of medical oncology. As a past president of the American Society of Clinical Oncology, Antman is a pillar of the American cancer establishment that Nicholas Gonzalez finds so unsympathetic. Yet she concedes the need for trials like his. "If half my patients are taking something different from what I prescribe, I'd better know what it does," she told me as we talked in her office, which looks out upon the George Washington Bridge from the Milstein Pavilion, at Columbia Presbyterian. "I can like it or not, but people talk about the costs of doing this sort of trial. They never seem to discuss the costs associated with not doing this kind of study, however. If you think about how many people are using these remedies in ways we don't understand, then it doesn't cost that much at all."

Antman simply wants to be able to offer coherent advice to patients. "They tell me what herbs they are taking, and I want to be able to put a slide on the wall and show them what those pills might do," she said. "I worry very much that the fact that we are doing this trial will put a university imprimatur on the Gonzalez regime, and that patients will assume that means Columbia supports this treatment. We do not." At that point, she got up, went to her desk, and ripped a page from the instructions that Co-

"That's O.K., Dad. I think I'll go with the ambient waterfall sounds tonight."

lumbia gives patients interested in the Gonzalez study. "Here," she said. "This says it better than I do":

Many Americans who develop advanced cancer for which standard treatments have little to offer, turn to alternative or complementary therapies. . . . There is no current conventional medical support for the theories and assumptions underlying the use of Nutritional Therapy. The Columbia College of Physicians and Surgeons does not support its use except as part of a properly conducted clinical trial.

I asked if it would be right to infer that she thought the trial wouldn't work. She shook her head. I asked if she had an idea why it might work. She said no. Did she have any opinions at all about the potential of nutritional therapy or the Gonzalez regime? "I have lots of opinions," she told me, "but none of them matter."

In early October, Gonzalez told his Lstory to nineteen members of the White House Commission on Complementary and Alternative Medicine Policy, which was appointed by President Clinton in an attempt to integrate alternative therapies more coherently into the mainstream of American medicine. "I want to erase this silly dividing line between alternative and orthodox medicine," James S. Gordon, a psychiatrist who heads the commission, told me. "We need to help people broaden their vision of what health can be." It's a task that Gordon, who speaks with the type of voice one finds on relaxation tapes, has been working on for twenty years, both at the Center for Mind-Body Medicine, in Washington, D.C., which he runs, and as a professor at Georgetown University medical school. Gordon traces his commitment to alternative medicine back to the early nineteen-seventies, when he injured his back in a yoga routine and found conventional physicians unable to help him.

Gonzalez spoke at the end of a long day in which the commission took testimony from senior officials at the N.I.H., as well as from professors, industry representatives, and beleaguered employees of the F.D.A. He strolled to the dais as darkness fell, and only a few people remained in the audience, at the Humphrey Building. Yet there he was: a man who had been shunned by colleagues,

attacked as a fraud, and nearly arrested for ignoring standard medical practices was speaking from the headquarters of America's health establishment. Moreover, he was sharing a platform with Stephen Straus, a highly respected researcher who had been drafted two years ago to take over the National Center for Complementary and Alternative Medicine and to apply some scientific rigor to its work.

Jim Gordon had been eager to take Gonzalez's testimony because, as he told me before the meeting, "Nick is the state of the art. His therapy is promising, he is not afraid to test it rigorously, and he is aware of the stakes." So, by the way, is Gordon. In his psychiatric practice, he refuses to prescribe antidepressants to patients, insisting that America is overmedicated and that most such pills merely numb symptoms. Gordon sponsors the most important alternativemedical meeting in America each year, the Comprehensive Cancer Care conference. It began in 1998 as something of a fringe event where Gonzalez was a marquee attraction, and where tapes of his presentations sold as if they were bootlegs by Bob Dylan. Last year, however, partly in self-defense, many wellknown "orthodox" cancer specialists attended the Gordon conference, and the National Cancer Institute decided to sponsor it. "I cannot begin to explain the change in attitude such a decision reflects,"Gordon said.

Because the hour was late, Gonzalez raced through his story, sounding at times like a record played at the wrong speed: medical school, Kelley's teachings, his belief in pancreatic enzymes, the various types of diets, and, finally, the persecution he believes he has experienced. He recounted his worst day, in 1993, when he heard that the New York medical board was trying to suspend his license. "I was in Switzerland, presenting my data to Dr. Pierre Guesry and his colleagues," Gonzalez said. Guesry, a former medical director of the Pasteur Institute, had become vice-president of research for Nestlé, and he sponsored the pancreaticcancer pilot study. "I got a call from my secretary to tell me they were trying to lift my license. There I was, in Switzerland, talking as a colleague to the world's most respected scientists. At home, though, I was seen as human pond scum."



"This first-quarter projected-earnings report—does it make my butt look big?"

Now, at the hearing, the questions were filled only with respect. Nobody asked about hair tests, or how pancreatic enzymes actually kill cancer cells. None of Gonzalez's past legal problems were mentioned, nor was there any discussion of the ethics of treating people for cancer with a regimen that has never been shown to help them. The coffee enemas were not discussed, nor Gonzalez's belief that William Donald Kelley is one of the most improperly maligned physicians in history. The conversation also never addressed another curious fact: why no conventional researchers seem capable of achieving results with Gonzalez's techniques. One commissioner was even disgusted that Gonzalez felt he had to rely on the scientific method

Later, in New York, Gonzalez didn't know what to make of the experience. He finds the medical establishment unrelentingly arrogant, but he has no genuine faith in the alternative, either. "Sometimes I think the weirdos are taking over," he said. I told him that I had been leafing through alternative-health magazines and had seen an advertisement for the Edelson clinic, in Atlanta, which claims to offer the Gonzalez program. The ad says that the director

of the clinic, Stephen B. Edelson, is, among other things, a professor of environmental medicine at a university in Kazakhstan.

"I don't even know that man," Gonzalez said. "I have never had a conversation with him. As much as people criticize orthodox doctors who act like there is a magic bullet, alternative people are fifty times worse. These esoteric publications always have articles about some nutrient with no control in some cells in a special cell line in Austria that if the moon is in the right position you get a tumor response in cell culture. And then suddenly it's on the Internet. . . . That's medicine today, that's our world, and God help me if I am a part of it."

Gonzalez said he was "very saddened" to find himself on the fringes of medicine, and that he still dreams that his exile will end. "I'm really not much of a revolutionary," he said. "I wear only blue and gray pinstripes. The greatest sadness in my life—other than my marriage, to Linda, which didn't work—is that I have been forced to work outside the academic mainstream. My greatest pleasure would be to return to Cornell and the Sloan-Kettering world. That's always where I have wanted to be. That has not changed. I don't think it ever will." •