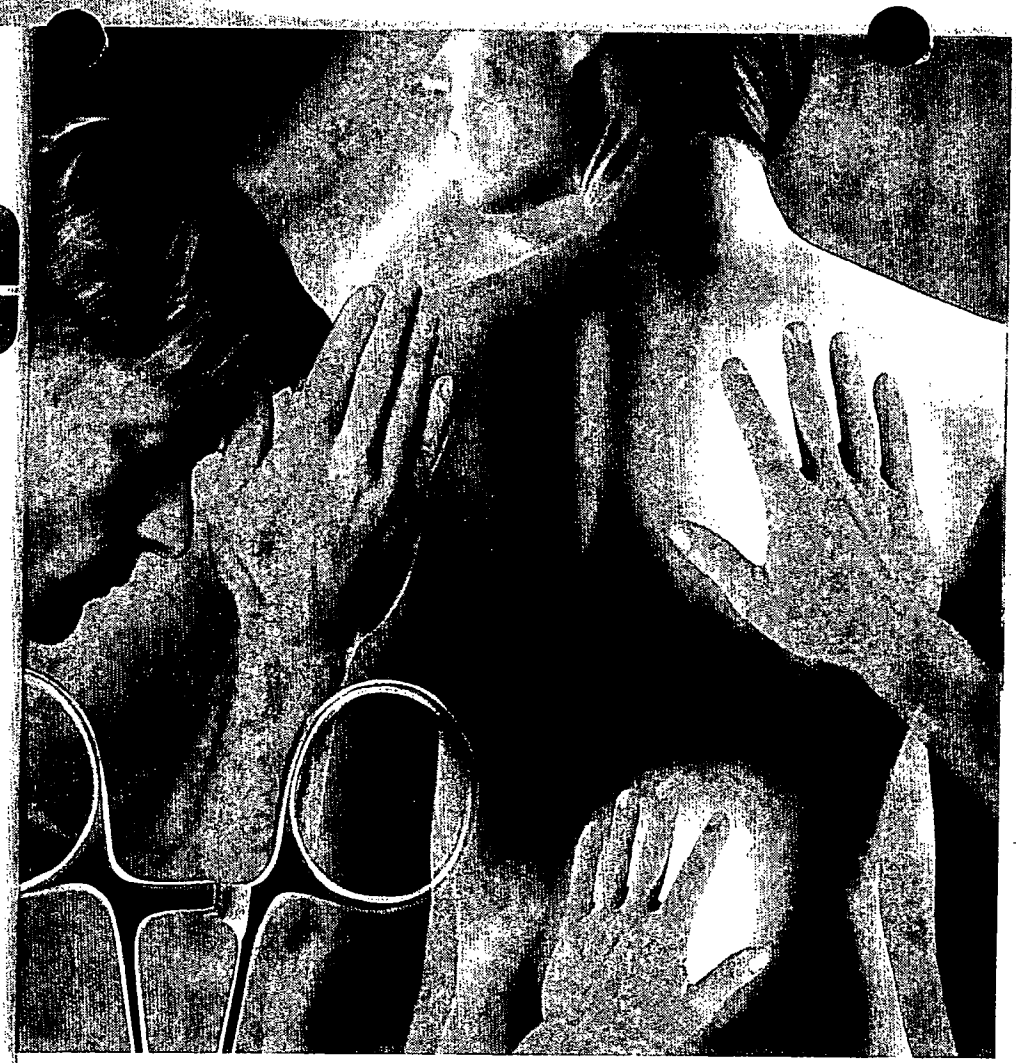
The Cutting Edge of Alternative Medicine

We asked America's top practitioners about the future of alternative medicine. Here are their exciting predictions and how you can take advantage of them *now* BY SARA ALTSHUL O'DONNELL



PHOTOGRAPH BY JOHN LEE

Every day, it seems, we read about some outside-the-box way to get well or stay healthy. Acupuncture for depression. Massage for migraines. Herbs for colds, skin problems, even Alzheimer's disease. With 4 out of 10 Americans using it, it's clear that alternative medicine is becoming less alternative all the time.

For *Prevention*'s first issue of the year 2000, we've asked five top healers to tell us about the future. Listen to them, and learn how *you* can channel alternative medicine's powerful feel-good potential today.

PREDICTION

Prayers and Mind Scans Will Become Routine Medical Procedures

"I think energy medicine is going to be one of the major medical developments of the next century," says Andrew Weil, MD, director of the Program in Integrative Medicine and clinical professor of internal medicine at the University of Arizona in Tucson. Dr. Weil's latest book, *Eating Well for Optimum Health*, will be published this April by Knopf.

There's nothing new about energy medicine, Dr. Weil points out. In fact, we've been tapping into energy's power to heal for decades. X-rays, CAT scans, and radiation treatments are forms of energy used to reliably diagnose and treat disease. If you've ever had a back injury, you may have even used a TENS (transcutaneous electrical nerve stimulation) unit, which uses electric shocks to ease pain. Magnets—electromagnets and simple magnets not much bigger than the ones on your refrigerator—are now being studied for everything from treating depression to healing wounds.

But it's the subtler, less understood, less measurable forms of energy healing that will factor into medicine's future, says Dr. Weil. **"This includes the kinds of energy that are found in ancient healing traditions such as acupuncture, tai chi, and qi gong, as well as homeopathy and the energy produced by energy healers."**

If this all sounds pretty "woo-woo" to you, just think of energy healing as harnessing the power of an invisible force. According to Dr. Weil, it's simple: Energy medicine uses forms of

energy to diagnose and treat disease—detectable energy such as heat, light, and sound. Think of a heating pad that transfers warmth to aching muscles or ultraviolet light therapy that improves skin conditions such as psoriasis. But **it also uses forms of energy we can't see or detect with scientific instruments.** For example, traditional Chinese medicine is based on the concept of qi (pronounced chee), which is the invisible energy that animates life. It's said to flow through the body in a specific pattern. According to believers, if qi flow is disrupted, health suffers.

Consider the case of homeopathy

Homeopathy is a case in point. It's an energy-based healing method.

Homeopaths believe that certain substances that cause symptoms in a healthy person will *cure* those symptoms in a sick person when the substance has been highly diluted. Homeopathic medicines are so diluted, in fact, that very often not a single molecule of the original substance remains in the remedy.

A scientific exploration of energy medicine just might reveal how homeopathy and other therapies work. And if we can understand and harness their healing powers, we'd have very potent weapons in our medicinal arsenal, suggests Dr. Weil. Because unlike the powerful chemical weapons we use now against diseases such as cancer, energy techniques are relatively free of side effects.

The proof's in the lab

Energy healing is already currently under scrutiny at the University of Arizona in Tucson, where the Human Energy Systems Lab has been established under the direction of Gary E. Schwartz, PhD.

Dr. Schwartz and the lab's codirector, Linda Russek, have examined the ways that energy communication takes place between two people. In their lab, they discovered that when an electrically charged body—such as a human being—moves through space, an electromagnetic force is created that can be measured on another person's body a few feet away. They also found that, at least for two people who care for one another, the electrical impulses from one person's heart register on the other's brain!

This suggests that energy transfer between two people (between an energy healer and a patient, for example) is very real. But many scientists remain skeptical, arguing that just being able to measure energy transfer between people isn't definitive proof that it can heal.

"We're attempting to document these energies, discover how they're generated, what their effects on the body might be, and how they can be used to promote healing," says Dr. Weil. "At the moment, all of this remains on the fringes of conventional science, but my hunch is that energy medicine will come into its own in the next few decades."

Prediction: Many forms of alternative medicine will soon become mainstream.

PREDICTION

Your Heart Surgeon Will Invite an Energy Healer into the OR

Guess what? It's happening today!

In an operating room in upper Manhattan, one of America's top cardiovascular surgeons is transplanting a new heart into the chest of a 46-year-old man named George. But Mehmet Oz, MD, director of Columbia University's heart-assist device program and medical director of New York Presbyterian Hospital's Complementary Care Center, isn't the only one who's performing miracles in the OR.

Working alongside him is energy healer Julie Motz. She's passing her hands over George's torso and head. In short, she's practicing a modern-day variation of the ancient therapy known as the laying on of hands. Today, we call it energy work.

"I see people who are scared, shocked, and angry when they confront cardiac surgery, whether it's a bypass or a transplant," says Dr. Oz. "I tell them I'm not concerned about their survival, because these days our surgical success rates are as high as 98%. I am very concerned, however, about how well they'll do *after* the surgery."

The Complementary Care Center offers a comprehensive approach that takes up where surgical intervention leaves off: helping people substitute healthy habits for deadly ones, according to Dr. Oz.

Patients are given the option of having therapies such as hypnosis, yoga, meditation, massage, music therapy, and even aromatherapy. For example, some presurgical patients are given specially recorded audiotapes—sometimes of Turkish Sufi music chosen by Dr. Oz—encoded with a subliminal message that cues them to stay relaxed and not feel pain. They're instructed to play the tapes regularly before their surgery. Then, when they're wheeled into the OR, they're given headphones and the tapes to play during surgery. Dr. Oz is

often told by his patients who use the tapes that they did better as a result.

"It's not about donning a saffron-colored robe and chanting *Hare Krishna*," he says. **"I want people to see illness as a learning experience, not an obstacle. That's why I want them to learn and use techniques that help them stay healthy, whether it's hypnosis to stop smoking or self-meditation training to achieve relaxation."** For more on Dr. Oz, read his book *Healing from the Heart* (Dutton, 1998).

PREDICTION

Your Doctor Will Use the Power of the Mind to Heal You

You've been in an accident, and you're hustled to the ER. The resident on call gives you a quick physical, but then something strange happens. She determines that you have internal injuries by performing a brain scan. No, not a CAT scan or any of those please-lie-quietly-in-this-huge-machine scans; this doctor actually scans your body with her *mind*.

Sounds like science fiction, right?

Wrong. What was yesterday's science fiction is today's science. Scenes such as this will happen frequently in the future, says Larry Dossey, MD, author of *Reinventing Medicine: Beyond Mind-Body to a New Era of Healing* (Harpercollins, 1999).

An example: At this very moment, there's a major research project underway at the Duke University Medical Center and the Durham Veterans Affairs Medical Center, both in Durham, NC. There, doctors are studying the effects of prayer, imagery, and touch on patients who are about to undergo angioplasty, a procedure that removes blockages from coronary arteries using a balloon inserted into the artery, says Dr. Dossey.

In this double-blind, controlled study, patients are offered a spiritual approach in addition to their surgery. Of those who accept, half are hooked into a global prayer effort. When people are assigned to the prayed-for group, their names are given to the Carmelite Sisters of Baltimore, MD, to Buddhist monks in the Kopan Monastery, Nepal, and the Nalanda Monastery in France, and to Protestant prayer groups throughout the US. Their names are also entered on the Virtual Jerusalem Web site, whose staff inserts written prayers for them in the Western Wall in Jerusalem.

"The people in the Duke prayer group experience 50 to 100% fewer side effects from cardiac procedures than those who aren't prayed for. These are just huge numbers," Dr. Dossey says. He adds that the study will soon be extended to five major US hospitals.

Another double-blind study looked at the effects of prayer on patients being treated for advanced AIDS at the California Pacific Medical Center in San Francisco. Forty patients were split into two groups. One group was prayed for, from afar, by a variety of healers from Christian, Jewish, Buddhist, Native American, and shamanic traditions. The other group received no prayers at all. Both groups knew that there was a possibility that they might be prayed for.

The results were described as significant. Over a 6-month period, those in the group that were prayed for saw their doctors less often and were hospitalized fewer times than patients in the control group. What's more, they felt better, describing their mood as being much improved.

Considering these and other studies on the power of prayer, "Healers have more ammunition than they can possibly imagine," says Dr. Dossey. "You know, the old wars are still raging between science and spirituality. I think it's time to call a truce. **As healers, we need to get smart and use prayer:** It's a tool that's essentially lying there for us, waiting to be used."

Find Integrated Care Here

Center for Health and Healing
Beth Israel Medical Center
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New York, NY 10003
(212) 420-2496

King County Natural Medicine Clinic
(affiliated with Bastyr University and the Community Health Centers of King County)
403 E. Meeker, Suite 200
Kent, WA 98031
(253) 852-2886

Program in Integrative Medicine
College of Medicine, University of Arizona
P.O. Box 245153
Tucson, AZ 85724-5153
(520) 626-7222

PREDICTION

Integrated Medicine Will Finally Become a Reality

The future of medicine may lie in *integrated medicine*. This new buzz phrase refers to largely conventional medical clinics that offer patients access to a variety of alternative treatments, sometimes combining them or selecting specific ones based on the needs of the individual. Already, integrated clinics are popping up across the country like mushrooms after a rainstorm.

New York City won't have to wait long for an integrated clinic affiliated with a major teaching hospital. The Center for Health and Healing, a free-standing clinic created by Beth Israel Medical Center, will be opening this spring and will offer a wide range of therapies. **Alternative medicine experts predict that the Center for Health and Healing will be a model for tomorrow's health care.**

Under the direction of Woodson C. Merrell, MD, the center is supported by Beth Israel Medical Center, a teaching hospital of Albert Einstein College of Medicine, and its four other affiliated teaching hospitals.

Services will be offered by primary health caregivers trained in herbal medicine, homeopathy, nutrition, and the mind/body disciplines. Or you might see a practitioner with a background in acupuncture, homeopathy, chiropractic medicine, psychotherapy, or osteopathy—or one of several different massage therapies. Also affiliated

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with the clinic are specialists trained in traditional Chinese medicine, Ayurveda, and Tibetan medicine healing systems.

As a model, and to pave the way for other integrative clinics, Dr. Merrell hopes to forge new ways of working with insurance companies so that you won't be paying for effective alternative therapies out of pocket.

"We're not just going to practice integrative medicine, we're going to study it, and we'll be able to provide insurers with cost comparisons. We hope to show that treating chronic conditions, such as diabetes, can cost less and be more effective in the long run with integrated therapies," says the physician.

PREDICTION

Health Care Will Focus on Preventing Disease

Ask Joseph E. Pizzorno Jr., ND, about this new trend toward integrated medicine, and he'll smile sweetly. That's because his field, naturopathy, has integrated alternative therapies for the past 100 years or so. Dr. Pizzorno is cofounder and president of Bastyr University in Kenmore, WA, the first fully accredited education and research center for natural health sciences in the US.

Naturopaths believe in using gentle, natural therapies to cue the body's own healing response. Their training focuses on nutrition, botanical medicine, traditional Chinese medicine, homeopathy, counseling, massage, hydrotherapy, and Ayurvedic medicine, in addition to general medical courses.

Natural medicine is designed to *prevent* disease, says Dr. Pizzorno. An example that's already made it to the mainstream is the discovery that folic acid supplements can reduce high blood levels of homocysteine, an amino acid linked to heart disease.

Dr. Pizzorno predicts that funding agencies that once routinely ignored nutrition studies will open their purses not only for nutrition research but for the whole gamut of "natural" medicine. **"We will have just as many breakthroughs in natural medicine as we do in conventional medicine, once we start substantially investing in the research,"** he says. •

Sara Altshul O'Donnell is Prevention's alternative medicine editor.

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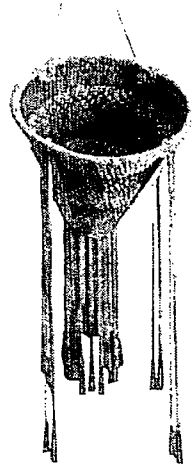
Ancient Healing Secrets



Make them work for you

You don't need to consult a medicine man to reap the health benefits of Native American medicine. By following a few simple rules—as easy as a walk in the park—you can bring good health and contentment into your life

by Sara Altshul O'Donnell

Along the banks of the Delaware River, near Frenchtown, NJ, a group of ordinary people gathers each month to celebrate a Cherokee healing ceremony.

At Dartmouth Medical School in Hanover, NH, America's first female Navajo surgeon meditates and prays, Navajo style, before each and every operation she performs.

At the Arizona Health Sciences Center in Tucson, a former intensive care doctor treats a woman whose asthma and depression haven't responded to conventional therapies. Doctor and patient head to a Cherokee medicine man. In the weeks that follow, her condition improves dramatically. ▶

Native Americans are not the only ones who believe that feeling part of something greater than yourself is a step toward better health. Medical research now supports it.

LEFT, MEICHAMBEL/ARS; RIGHT, MARK ANDELMAN/ISI

Ancient Healing Secrets

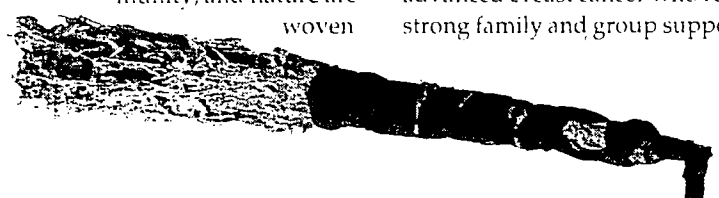
If this makes you want to rush right out to your local shaman, hold on. Most authentic Native American healers live in remote parts of the US, where they're pretty inaccessible to the rest of the world. They don't hang out shingles, and they don't open their door to strangers.

Yet Native American wisdom has a lot to offer. Read on to discover how you can weave its healing magic into *your* life.

Healing, Native American Style

Most Native American nations—there are more than 550 tribal groups in North America—teach that everything on the planet has a spirit. To people who believe, that means that the earth and its animals, plants, and rocks are all living beings. So, too, water, fire, lightning, wind, and air. And to believers, we're not just part of everything that surrounds us—we're actually *kin* to it all. So when a believer gathers herbs for medicine, hunts animals, harvests plants for food, or turns on the tap for water, he does so with respect and gratitude.

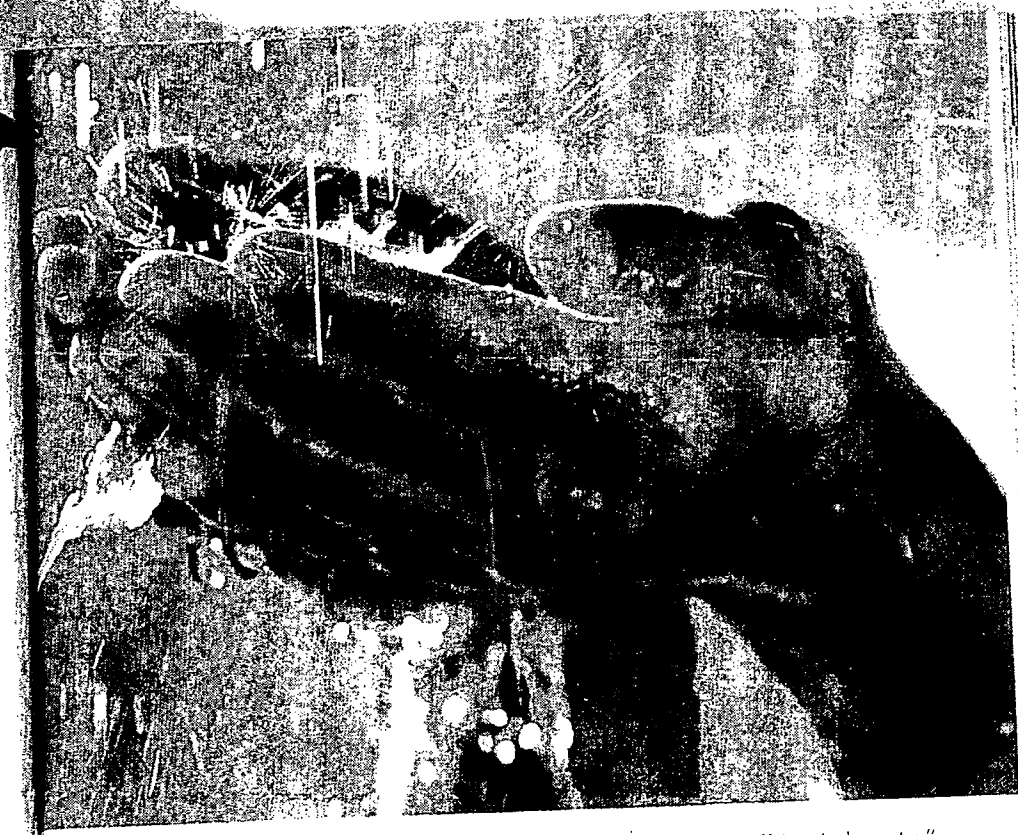
There's more. For Native Americans who still practice their traditional ways, medicine, religion, family, community, and nature are woven together as tightly as a reed basket. Harmony with the world outside you and the mind inside you is the short path to contentment.



Native American healers tell us that when you are in harmony with your surroundings, you'll also be in good health. When people don't "walk in harmony" with all phases of life, it creates stress—and (no mystery here) stress leads straight to illness, says Lori Arviso Alvord, MD, America's first female Navajo surgeon and author of *The Scalpel and the Silver Bear* (Bantam, 1999).

"The tensions that arise from living in disharmony can cause all kinds of health problems, such as ulcers and migraines, for example," says Dr. Alvord, also assistant professor of surgery and associate dean of student and minority affairs at Dartmouth Medical School.

Case in point: In the past two decades, research has validated the Native American reliance on close family and community ties, notes Dr. Alvord. The medical literature is full of studies proving that people who get support for a problem tend to do better than people who don't. A landmark study showing that women with advanced breast cancer who receive strong family and group support live longer than those who don't is a perfect example. "Support really matters," says Dr. Alvord.



Native Americans believe that everything on the earth is alive, and we're kin to it all.

You can reap the benefits of Native American medicine by adhering to four important elements of the healing wisdom of America's tribal people: First, spend more time in the natural world. Second, care for your environment. Third, strengthen your ties to family and community. Finally, create meaningful ceremonies in your daily life. Here's how:

1. Tune In to the Natural World

The Navajos call this harmonic balancing act "walking in beauty," and **experts on Native American healing tell us to focus on our natural surroundings every day.** Why? Because nature reminds us about what truly endures and has real value, says Karen Koffler, MD, assistant professor in the department of medicine at Northwestern University in Evanston, IL.

"In our culture, we focus on me, me, me," Dr. Koffler says. As our life gets more stressful, we start to lose perspective, we start feeling bad, and it can spiral out of control—"that's when symptoms can arise or worsen," she adds. By tuning in to the beauty of the

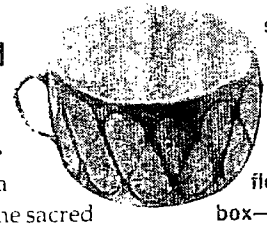
Tribal cultures think that it's important to stay connected—to the earth and to each other.

great outdoors as often as possible, we develop appreciation for what it means to be alive and a part of this planet—and that, in itself, promotes wellness, says Dr. Koffler.

Think this is some back-to-the-earth hippie theory? Think again. In the past few years, a new area of study called environmental psychology has emerged, which is devoted to the environment's impact on our health. Its scientists, called environmental psychologists, examine the relationships between people and their physical surroundings. The results of several studies confirm what Native Americans have known for centuries: Viewing natural scenery affects the parasympathetic nervous system and calms people who are under stress. Even a quick trip to a park can restore serenity to people who are feeling stressed.

TAKE-HOME MESSAGE:
Making a nature connection can be as simple as really noticing blades of grass or flowers that creep up through a sidewalk crack; taking a slow, deliberate, daily walk past an urban garden; or strolling through your neighborhood to focus on the growth around you.

Ancient Healing Secrets



2. Take What You Need and Leave the Rest

As do other native people, the Cherokee believe that human beings have a responsibility to "leave the sacred altar we call the earth better than we found it," says David Winston, an herbalist trained in Cherokee medicine, professional member of the American Herbalists Guild, and head of the Herbal Therapeutic Research Library in Broadway, NJ. This belief is one of the four "great laws of nature" that form the backbone of many Native American traditions:

1. Everything you do should serve the greater good.

2. Don't take any life—fire, water, plant, or animal—without good reason.

3. Out of life comes death, and out of death comes life. We're not designed to live forever, notes Winston. We're designed to be here, to make a positive difference, and to return to the earth after death so that future generations can come and do the same thing.

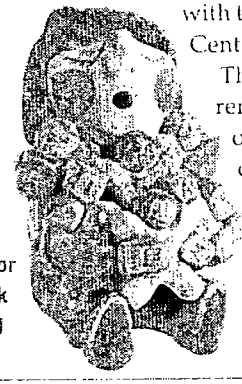
4. Protect your own environment from harm.

TAKE-HOME MESSAGE:
Studies show that doing good for others can make you feel better too. Adopt several of these Native American principles: Sponsor a highway and regularly pick up litter along your personal stretch of road. Volunteer to care for wounded or orphaned wildlife at your local nature center (they're in cities too!). Plant butterfly- and bird-friendly flowers in your yard or window box—and never use pesticides.

3. Strengthen Your Family and Community Ties

Last spring, the US stopped in its tracks, shocked, when two teenagers gunned down classmates in Littleton, CO. In the days and weeks that followed, media pundits tripped over themselves trying to place blame. From easy access to guns, to video game violence and movie mayhem, there seemed to be plenty of scapegoats to go around.

But the Littleton tragedy's message was really about what can go wrong when family and community ties unravel, suggests Carl A. Hammerschlag, MD, a psychiatrist in private practice in Phoenix and author of several books on Native American ceremonies. Dr. Hammerschlag was chief of psychiatry with the Phoenix Indian Medical Center for 14 years.



The deaths at Columbine High reminded Dr. Hammerschlag and other experts that *Prevention* consulted about one major difference between our culture and that of Native Americans their utter dependence on strong family and community connections. Take the Navajo

and Cherokee traditions, for example. When a person gets sick or has an emotional problem, she becomes the focal point of her family and community. "Everybody close to that person gathers together from far and near to support her," says Dr. Hammerschlag. Dramatic, moving ceremonies are conducted that may last several days or longer. "Can you imagine the healing power? **When practically everyone you know is gathered on your behalf to celebrate your wellness, it has a tremendous effect on helping your body—and spirit—recover,"** he says.

TAKE-HOME MESSAGE:
Want to get a little closer to your community? Attend a local school board meeting once in a while—especially if you don't have kids. Become a young person's mentor (ask a school principal how). Plan a block party, or volunteer to help weed your community garden. Not a joiner? Then take a walk around your neighborhood on nice evenings; you'll be surprised how many neighbors you'll meet.

4. Create Regular, Meaningful Ceremonies

Every time she enters the operating room, Dr. Alvord privately invokes what Native Americans consider the power of ceremony by meditating and praying in the traditional Navajo way. She prays during surgery too, especially if things start to go wrong. "I call on all resources, mental and spiritual, to help get a patient through a difficult operation," says Dr. Alvord. She also talks to her patients while they're under anesthesia because she believes that, at some level, it helps them to relax and even bleed less during the surgery.

Even simple ceremonies such as those used by Dr. Alvord separate the ordinary from the extraordinary, suggests Dr. Hammerschlag in his book, *Healing Ceremonies* (Perigee, 1997). They give us a chance to find the healing power that inspiration provides, he says. Beyond that, ceremony reminds us that we are part of something greater than ourselves, and helps us make the connection to the great life around us, says Winston.

TAKE-HOME MESSAGE:
Ceremony doesn't require access to a medicine man. It can be as simple and personal as setting aside some time each day to quietly express your gratitude for the blessings in your life. You can light candles, use incense or essential oils, or sip a special cup of tea to make the moment unique and meaningful. And remember that ceremonies are all around us: weddings, christenings, bar mitzvahs, graduations. The next time you attend one, participate fully and be truly aware of the passage that you're celebrating. •

Sara Altshul O'Donnell is Prevention's alternative medicine editor.

Prevention's Minimeal Diet

Your Secret Weight Loss Weapon!

Are minimeals the *real* secret to staying slim?

Do you like to snack? Then you'll love *our* Minimeal Diet!

You can burn more calories each day as you get older—by eating *more often!* On a 1,500-calorie-a-day diet, you can enjoy six 250-calorie minimeals such as those at right.

7:30 AM—Wake-Up
1 cup raisin bran
1 cup 1% milk
hot tea
250 calories

9:30 AM—AM Boost
1 cup orange juice with calcium
½ whole wheat bagel
2 teaspoons light cream cheese
250 calories

Noon—Munchtime
veggie burger
whole wheat hamburger roll
1 tablespoon mustard
10 sweet red pepper strips
sliced tomatoes, lettuce
250 calories

3:30 PM—PM Prep
1 cup instant lentil soup
220 calories

6:30 PM—Renewal
dinner salad:
1 cup bulgur
2 cups mixed veggies
2 tablespoons vinaigrette dressing
270 calories

9:00 PM—Beddies
apple
1½ ounces reduced-fat Cheddar cheese
1 sheet rye crispbread
255 calories

HILMAR

This woman says she can feel your pain... and heal you.

by Ellen Michaud

Can people really use the power of their mind to heal? *Prevention*'s Editor-at-Large, Ellen Michaud, set out to learn what's behind medical intuitives—a hot, new trend in American health care. Here's her report

Sitting in the warm California sun overlooking the San Francisco Bay, 56-year-old Julie Motz is explaining to me how she can sense people's ills, then use her own personal energy to relieve their pain, cure their diseases, and make them whole again.

Julie is an "intuitive healer"—someone who uses what appears to be psychic ability to diagnose and heal. Though by virtually anyone's definition she practices an "out there" therapy, she has been invited to work with surgeons in operating rooms at Columbia University in New York City and Stanford University. Perhaps the most prominent medical intuitive is Caroline Myss, author of *Why People Don't Heal and How They Can* (Harmony Books, 1997) and star of her own PBS special.

Intuitive healer Julie Motz: Relationships can hurt—and heal you.

PHOTOGRAPHY BY MEL LINDSTROM

Julie Motz "feels" the emotional pain in Mauryne Lees's aching arm.

"I have little patience with angels, channels, and all that stuff," says intuitive healer Julie Motz. "That's just not where I operate."

I'm finding Julie's explanation of what she does hard going: The issues are complex, the proof anecdotal. To any graduate of Biology 101, the idea that a woman who hasn't gone to medical school can figure out whether the pain under my rib is caused by liver disease or an overdose of refried beans is difficult to embrace. Or worse: She's more likely to tell me it's triggered by something that happened to me when I was 5.

But Julie is accustomed to dealing with the doubtful. **And from the moment we meet, she makes it clear that, as the daughter of a theoretical physicist, the sister of a respected doctor, and someone who earned a master's degree in public health from Columbia University, she is a child of science, not a space cadet from the outer rings.**

"I have little patience with angels, channels, and all that stuff," she says firmly. "That's just not where I operate." Instead, Julie focuses on the complex interaction of mind and body, psychology and physiology, to influence how the body functions.

And although science is not yet able to explain exactly what it is she does, the fact is that, under her care, people frequently get better. They bleed less during surgery, heal faster afterward, and require fewer painkillers.

Can Your Past Trigger Disease?

To show me how intuitive diagnosis and energy healing work, Julie has invited Mauryne Lees, a 58-year-old retired San Franciscan who has been suffering from shoulder pain and a numb hand, to join us in my hotel room.

Based on magnetic resonance imaging (MRI), Mauryne's orthopedist has told her that the pain and numbness in her shoulder and hand are caused by compressed disks and an arthritic bone spur in her spine, which are pressing on a nerve. He has prescribed the standard pain pills, anti-inflammatories, muscle relaxants, and physical therapy. But they haven't done much good. So Mauryne is hoping that Julie, who relieved Mauryne's angina after a heart attack in 1996, will be able to relieve her shoulder pain and numbness as well.

Unlike traditional medicine, Julie attacks what she believes to be the underlying cause of most illness: emotions that have been stored in the body at a time when the conscious mind was too overwhelmed to handle them.

Now understand: We're not talking about typical mind/body medicine here. Most doctors now accept that what goes on in the mind affects the body. Witness the plethora of studies linking hostility to heart attack. But few warm to the notion that it's only your emotions or your past that are making you sick. And many regard medical intuitives as not much different from palm readers.

But Julie feels that not only are these emotions trapped in a prison of flesh, but many times they have lain there undetected since childhood. An abusive mother, a short-tempered father, a jealous sibling—all, in Julie's view, can stimulate the kind of damaging emotions that overwhelm our ability to process them.

In most cases, says Julie, the trapped feelings will fester like a jagged emotional splinter until they become so disruptive that the part of the body where they're stored screams for attention. It's Julie's belief that most people experience those trapped emotions as pain or illness. But in ways that even she

doesn't fully understand, Julie says that she senses the emotions themselves—and their causes.

Healing a Mother's Rage

Settling back against the cushions scattered on my sofa, Mauryne winces as the arthritic spur on her spine hooks its bony little claws into a nerve and gives it an extra-nasty little twist.

Julie, who sits down in a chair beside her, asks her to describe the pain. "It's a stabbing kind of pain that starts in my shoulder and runs down my arm," says Mauryne, twisting her hand and poking it toward Julie as though she's about to stab her. Julie closes her eyes and concentrates. "It feels like an electric jolt," she tells Mauryne, who nods in agreement.

Opening her eyes, Julie slips to her knees on the floor beside the sofa. Gently, she places two fingers of her right hand on the little finger of Mauryne's right hand, one on either side of the nail. Both are classic acupressure points. Then she leans forward and slides her left hand under Mauryne's painful shoulder and presses lightly. Mauryne grimaces, closes her eyes, and leans her head back against the cushions.

Julie watches her intently. "I feel a shock going down your spine," Julie tells her. Then a moment later: "I feel your mother's rage."

Mauryne opens her eyes and looks surprised. "I see you cowering as a kid," Julie adds. "Was your mother left-handed? Did she ever hit you on the right side of your face?" Looking

Julie Motz: Emotions express themselves as physical pain.

slightly stunned, Mauryne nods.

"What did your shoulder do when she hit you?" Julie asks. "Did you jerk it upward to shield your face?" At Julie's words, Mauryne's shoulder jerks almost reflexively. Yes, she acknowledges, then closes her eyes and snuggles her cheek into a cushion.

For the next 10 minutes, Julie stays focused on Mauryne's pain. Periodically, she tells the woman what emotions she feels are trapped inside her shoulder. Mauryne has had a hard life—an abusive mother, a rage-filled father, a murdered daughter, and two grandchildren who acted out. And Julie seems to sense it all. As Julie mentions various emotions, Mauryne begins to recount fragments of her childhood and, eventually, begins to cry. Julie murmurs quiet responses to Mauryne's tearful memories, correcting negative self-perceptions and gently inserting positive affirmations.

Finally, Julie asks, "How are you feeling?" Tentatively, Mauryne stretches out her arm, shrugs her shoulder, and smiles. "The pain is gone," she admits.

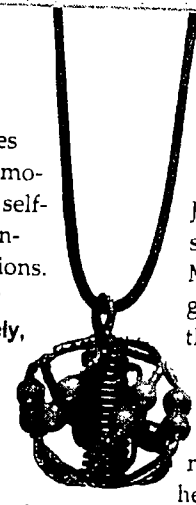
Julie nods, then quietly reminds Mauryne that she's no longer a kid, and she no longer needs her shoulder to absorb her mother's rage. She suggests that Mauryne thank her shoulder for protecting her as a child, then asks Mauryne if she can actually move "into" the feelings trapped within her shoulder.

> It can be hard to tell the difference between a real healer and a very expensive con job.

But Mauryne isn't paying attention. Her eyes have snapped open, and she's staring at her hand in astonishment. "The feeling is coming back!"

Julie pauses, then asks Mauryne to see if she can "come into" the parts of her hand that are still numb. She suggests that Mauryne imagine that she is reaching out with her partly numb hand to caress her dead daughter.

Fresh tears slide down Mauryne's cheeks as her face crumples in grief. Julie gently speaks aloud the emotions she feels within Mauryne: the love Mauryne feels for her daughter, her grief that the girl is dead, her anger that she's been left behind.



Metz uses this as an energy detector.

Julie waits quietly beside her for several heartbeats, then leans forward and does something I have never seen anyone associated with the health professions do: She kisses Mauryne's tear-streaked cheek, slips both arms around her shoulders, and holds her in her arms.

Science Attempts to Explain the Healing

Later over lunch, Julie explains what I observed. "Relationships heal," she says simply. The dialogue between Julie and Mauryne released damaging emotions, while the loving energy that surged through her body as she focused on the woman's pain was, she believes, directly transferred to Mauryne's body.

"I don't know how it works, but I suspect that [energy particles called] neutrinos flow into the energy field and body of the patient," she speculates. Once transferred, the energy alters the electrical impulses and cells that had been damaged by Mauryne's stored anger and grief. Eventually, Mauryne's body resonated with Julie's own healing energy.

The notion of two bodies vibrating with a shared energy was unsettling. But then I started thinking about the

tuning forks in my eighth-grade science lab. I'd tap one fork against my lab partner's desk and set it to vibrating, then tap another. And although both forks started off vibrating at totally different frequencies, within seconds their vibrations were completely in sync. Was this what was going on with Julie and Mauryne?

"Tuning forks may be a good metaphor for what happens," says Gary E. Schwartz, PhD, director of the Human Energy Systems Lab at the University of Arizona in Tucson. "There is no reason to believe that the electrical pulses generated by the heart stop at the skin" just because the skin is where electrodes from an electrocardiogram (EKG) machine picks them up. After all, the pulses have already traveled all the way from the heart to the skin itself.

In fact, says Dr. Schwartz, "my co-director, Linda Russek, and I have explored some of the ways in which energy communication between two people can take place. And, in our lab, we've documented the fact that when you move an electrically charged body such as a human being through space, it creates an electromagnetic force that can be measured on another person's body a few feet away."

Most scientists don't find this data convincing and don't accept it as evidence that energy transfer is capable of healing just because you can measure it. Nevertheless, Dr. Schwartz and his colleagues have conducted a number of studies that indicate that the transfer of energy between two people is very real.

Should You Try This at Home?

Can you become an intuitive healer? "It depends on how you're wired," says psychotherapist Belleruth Naparstek, author of *Your Sixth Sense* (HarperSanFrancisco, 1997). Even if you don't have the proper wiring to diagnose and heal, you can certainly cultivate the intuition you have to help you with your own ills.

Here are eight ways she recommends to encourage your own healing sixth sense:

- **Open your heart to others.**
- **Pray for guidance, clarity, and integrity.**
- **Play intuitive games: Try to guess which bank teller line will open next ... or who's calling when the phone rings.**
- **Keep a journal of intuitive experiences.**
- **Find an intuitive teacher who is willing to guide you.**
- **Seek solitude so that you can begin to hear your own inner voice.**
- **Meditate once or twice a day for 15 minutes each time.**
- **Examine your thoughts and actions until you know your own internal motivations, wishes, and desires. It will help you avoid projecting them onto others during the intuitive process.**

The Love Factor

In one experiment, for example, he and his colleagues hooked up two people to EKG machines that measure electrical impulses generated by the heart, then wired them to electroencephalogram (EEG) machines that measure electrical impulses generated by the brain. Moments later, they seated the two people face-to-face, 2 to 3 feet apart, and told them to close their eyes.

The result? Not much in pairs of people who were uptight about the experiment, admits Dr. Schwartz. But in those who felt relaxed, open, and loved—emotions documented by other tests—the electrical impulses from one person's heart registered in the electrical impulses of the other's brain.

"Since healers are usually engaged in working with someone in a loving context, our work not only suggests that some of the energy is being transferred from 'healer' to 'healee,' but that it may be coordinated by the heart of the healer," says Dr. Schwartz.

Whether an energy transfer can occur just between heart and brain or between other organs as well isn't known, says Dr. Schwartz. "But it's something we're exploring."

Could It Really Work?

Although most scientists aren't ready to accept the idea that intuition and personal energy can heal, some are keeping open minds. "It may be a placebo response," suggests Redford Williams, MD, director of the Behavioral Medicine Research Center at Duke University in Durham, NC. "And it may work because the healer is caring and warm and listening.

"Warm, supportive relationships are powerful medicine," Dr. Williams adds. "And we've got the evidence to prove it. If you take a look at a study we did at Duke a few years ago, you'll find that people with heart conditions who lacked these relationships were three times more likely to die than those who had them."

If you think you'd like to give intuitive healing a try, ask around for personal referrals in your own community—from friends, holistic healers, or your acupuncturist, says Belleruth Naparstek, a psychotherapist in Cleveland who specializes in mind/body medicine. If all else fails, Naparstek provides a list of intuitives in the back of her book, *Your Sixth Sense* (HarperSanFrancisco, 1997).

Our advice? Don't see a medical intuitive instead of a doctor. "Above all, use common sense," says Naparstek. Anything an intuitive tells you about your condition should match your doctor's opinion, results of medical tests, and your own inner sense of what's true. If not, take a hike, she advises. *Be very wary.* Medical intuitives frequently charge between $45 and $250 an hour or higher. And it's hard to tell the difference between the healer who can help and a very expensive con job. •

Editor-at-Large Ellen Michaud is keeping an open mind.

OYSTER
The Chinese use these delicate, iron-rich mushrooms to relax joints and muscles.

Mushroom Medicine

Delectable fungi may have the potential to lower cholesterol, prevent cancer, treat diabetes, fight the flu—and maybe even rev up your sex life!

BY SARA ALTSHUL O'DONNELL

Though I'm a mushroom-in-any-form lover, I once thought that, nutritionally speaking, these nonvegetables were pretty much a nonentity. Boy, was I wrong. To my amazement, I've just learned that some yummy exotic mushrooms—shiitake, maitake, oyster, and enoki, in particular—are very, very good for you in some very unusual ways. They can kill germs, prevent infections, and lower cholesterol. And they may have antitumor action. As we speak, some mushrooms are being tested as a possible diabetes treatment. And one top mushroom expert calls cordyceps nature's turn-on. (Cordyceps is a rare Chinese mushroom available as a nutritional supplement.)

True, they don't pack spinach-size amounts of vitamins and minerals. But five medium-size mushrooms do contain about as much riboflavin as a glass of milk, as much fiber as a medium tomato, and healthy amounts of niacin and copper. And mushrooms add meaty savor and texture to recipes without adding excess salt, fat, or calories.

PHOTOGRAPH BY MITCH MANDEL/RD

What Helps Them, Helps You

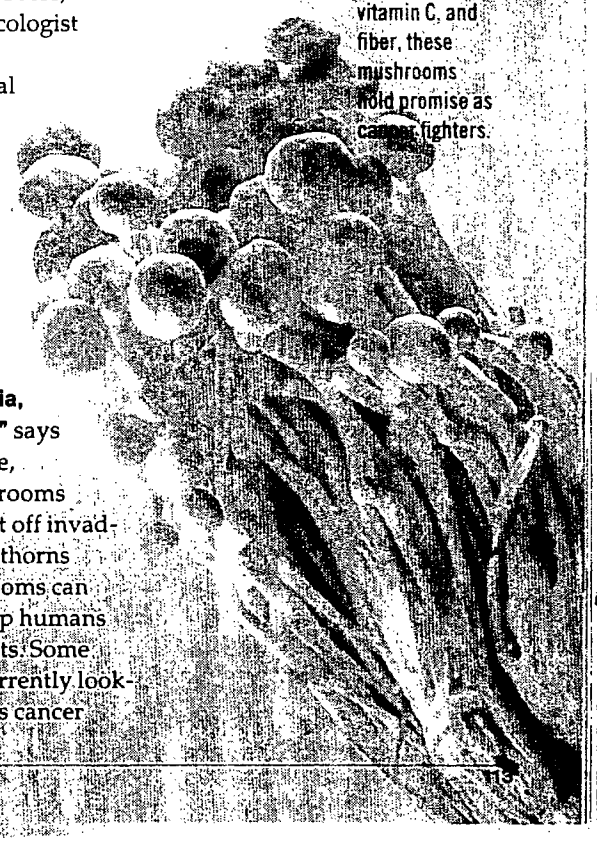
But how did mushrooms get so medicinal? We're talking about fungi, many that live on dead wood in shady forests. No comparison to vegetables, which soak up the sun in nutrient-rich soil.

Prevention put that question to Paul Stamets, author of *Growing Gourmet and Medicinal Mushrooms* (Ten Speed Press, 1993) and a widely regarded mycologist (mushroom expert).

His answer? Though the typical mushroom habitat appears barren, nothing could be further from the truth. In fact, it's an environment teeming with life, all of which fights a to-the-death struggle for a share of available real estate—and nutrients.

"Mushrooms possess natural immune enhancers and antibiotics because they compete with bacteria, viruses, and other fungi to survive," says Stamets. To enable them to thrive, Mother Nature has armed mushrooms with special substances that fight off invading organisms. Think of them as thorns on a cactus. Apparently, mushrooms can use those same substances to help humans fight off disease-producing agents. Some 20 cancer research centers are currently looking into medicinal mushrooms as cancer fighters, according to Stamets.

Douglas Schar, DipPhyt, MCPP, a London-based herbalist, says, "Over the last 20 years, various mushrooms were screened for their medicinal action. Here's what we've learned: **To a greater or lesser degree, all mushrooms contain antiviral, antibacterial, and antifungal action."**



ENOKI
Laced with iron, vitamin C, and fiber, these mushrooms hold promise as cancer fighters.

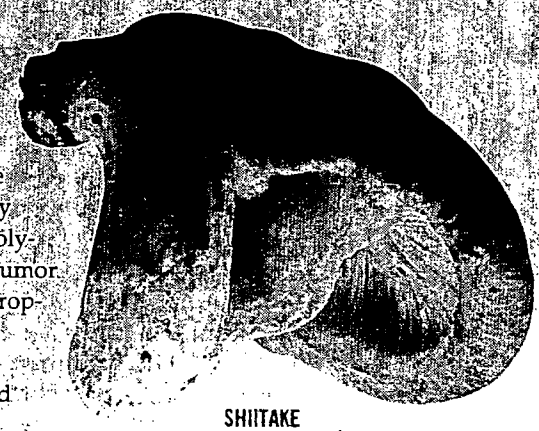
Mushroom Medicine

How Mushroom Medicine Works

All mushrooms contain compounds called polysaccharides, large chainlike molecules made up of many smaller sugar molecules. Polysaccharides have both antitumor and immune-stimulating properties and are also found in other immune-enhancing herbs, such as echinacea and astragalus.

In his book, *Medicinal Mushrooms* (Interweave Press, 1996), herbalist Christopher Hobbs suggests that these giant polysaccharide molecules, which are similar to the cell membranes of bacteria, "may fool our immune system into mounting an immune response to them." This response, he says, jump-starts a variety of other immune responses, including an increase of killer T-cells, which attack other potentially harmful cells. **In addition to antiviral and antibiotic properties, some mushroom polysaccharides also seem to have the ability to lower blood pressure and reduce blood levels of lipids (fats), as well as sugar.**

And there's more. Medicinal mushrooms contain compounds called terpenes and steroids, some of which have antitumor activity. According to Hobbs, these compounds also make certain mushrooms useful for treating infections, flu, and heart conditions.



SHIITAKE
These delicious cholesterol-cutters have anticancer potential.

Come along on our medicinal mushroom tour, and see what health benefits these forest-dwellers have to offer.

Shiitake *(Lentinus edodes)*

Ancient remedy may lower cholesterol, fight cancer, battle infection

If you love shiitake mushrooms in Chinese stir-fried dishes, you'll be delighted to know that they have a 2,000-year-old tradition as a healing food. Now, **scores of studies point to shiitake's promise for treating conditions such as diabetes, high blood pressure, and high cholesterol. In one small study on cholesterol, healthy women who ate 90 grams (g) (about 3 ounces or ⅓ cup) of fresh shiitake every day for a week lowered their cholesterol by 9 to 12%.** Other studies indicate that these delicious fungi may also help combat bacterial infections and flu viruses.

Lentinan, a shiitake extract, is approved as an anticancer drug in Japan. And a shiitake extract with the brain-numbing name of activated-hexose-containing compound is being studied as a prostate cancer treatment by doctors at the University of California, Davis Cancer Center in Sacramento. Other shiitake extracts appear to have antitumor activity too. However, it's unlikely that eating shiitake mushrooms can provide the same level of antitumor benefits as the compound, because it comes from specially grown shiitake spores.

Shiitakes are available both fresh and dried in most supermarkets and can be used in most recipes that call for fresh or dried mushrooms.

Enoki *(Flammulina velutipes)*

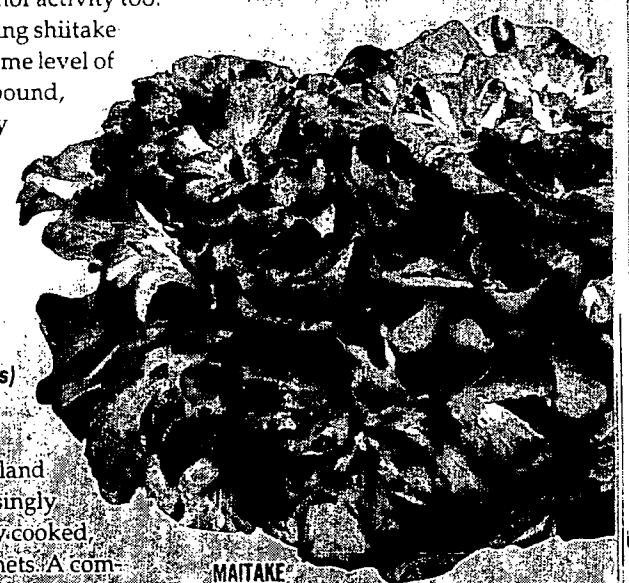
Tiny, tasty mushrooms may fight cancer

Despite their teensy size and bland appearance, enoki are "surprisingly flavorful" when served lightly cooked in soups or stir-fries, says Stamets. A compound in enoki, the polysaccharide flammulin, has antitumor properties. Interestingly, **Japanese enoki growers living near the Olympic city of Nagano have unusually low rates of cancer**, a phenomenon that researchers link to their frequent enoki eating. As a bonus, enoki is laced with fiber, iron, and vitamin C. Find these little, long-stemmed beauties where other exotic mushrooms are sold.

Maitake *(Grifola frondosa)*

May ease immune problems, lower blood pressure, prevent cancer

According to ancient legend, when people found this delicious mushroom, they danced



MAITAKE
Rare and delicious, they're under study for everything from weight loss to HIV/AIDS.

Where to Find Medicinal Mushrooms

FUNGI PERFECTI
(800) 780-9126
Mushroom extracts, grow-your-own mushroom logs, dried mushrooms

MAITAKE PRODUCTS, INC.
(800) 747-7418
Dried maitake for cooking and maitake supplements

CREEKSIDE MUSHROOMS, LTD.
(724) 297-5491
Fresh mushroom wholesaler of maitake, shiitake, and others

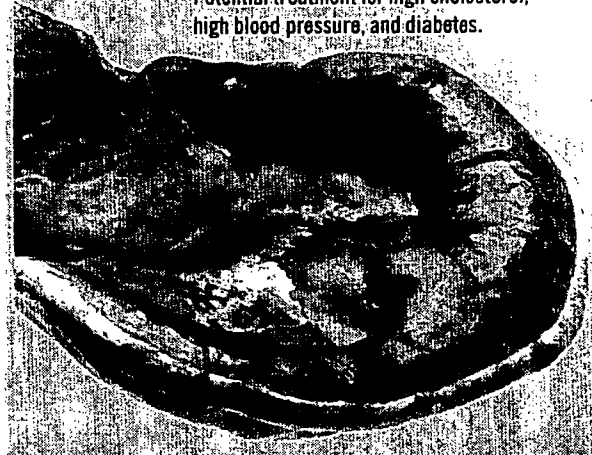
with joy because of its celebrated life-enhancing benefits.

Maitake contains a unique blend of potent polysaccharides, especially the immune-enhancing beta-D-glucans. *Prevention* has reported on maitake twice in recent months. We told you that it's an immune-boosting tonic herb—one that you take daily over a long period of time—that eases problems such as chronic tonsillitis, sinusitis, chronic urinary tract infections, or any recurring bacterial or viral infection. In March, we noted that **an extract made from whole maitake mushrooms has been shown to lower blood pressure and improve insulin levels.**

Today, scientists are studying maitake for its role in lowering blood pressure, cancer prevention, diabetes, HIV/AIDS, immune function, and even weight loss.

Maitake supplements are available in health food stores; some large grocery chains have begun to carry fresh maitake; and dried maitake is available by mail order. They are delectable cooked in any dish that calls for mushrooms.

REISHI
Potential treatment for high cholesterol, high blood pressure, and diabetes.



Spaghetti with Red Sauce and Mushrooms

Not wild about mushrooms? Here's the perfect way to sneak them in. Mushrooms impart a wonderfully meaty flavor to this vegetarian sauce.

- 1 Tbsp olive oil
- ½ c chopped onion
- 2 garlic cloves, finely chopped
- 1 lb shiitake mushrooms, chopped
- 1 lb crimini or white button mushrooms, sliced
- 1 can (16 oz) crushed tomatoes with juice
- 1 Tbsp tomato paste
- 2 Tbsp chopped fresh basil
- 1 tsp sugar
- 1 tsp dried oregano
- ½ tsp salt
- 12 oz spaghetti

1. Spray a large nonstick skillet with olive oil spray. Add the oil and heat over medium heat. Add the onions and garlic. Cook, stirring occasionally, 3 minutes, or until tender.
2. Add the mushrooms to the onion mixture. Cook, stirring occasionally for 15 to 20 minutes, until liquid evaporates and mushrooms are nicely browned.
3. Stir in the tomatoes, paste, basil, sugar, oregano, and salt. Bring to a gentle boil. Reduce heat and simmer, uncovered, for 15 minutes, until sauce is slightly thickened.
4. Meanwhile, cook pasta according to package directions. Serve sauce on top of the hot pasta.

SERVES 6

Per serving: Cal 477, Fat 5.8 g, Sat. Fat 8 g, Chol 0 mg, Fiber 4.4 g, Pro 16.6 g, Carb 94.1 g, Sodium 500 mg

Reishi *(Ganoderma lucidum)*

May lower cholesterol and blood pressure, ease asthma, calm nerves

In China, this lacquered-looking fungus has many nicknames: "spirit plant," "mushroom of immortality," and "herb of spiritual potency."

Reishi is a virtual chem lab full of compounds that have been studied extensively for their medicinal value. Though most of the reishi studies have been done on animals, the results seem promising for reishi's potential as treatment for human high cholesterol, high blood pressure, and diabetes.

In China, where many of the reishi studies are conducted, 2,000 people with chronic bronchitis were given a tablet form of reishi syrup. Within 2 weeks, reports Hobbs, 60 to 90% of the people felt better. Older people seemed to do especially well on the tablets, particularly those with bronchial asthma.

"I've seen its calming and sleep-promoting effects for years in my own clinical practice," says Hobbs. Compounds called triterpenes may be responsible, and animal studies indicate that reishi calms the nervous system.

Reishi is available dried and as a nutritional supplement in liquid and solid form at health food stores and via mail order.

Alternative Medicine Editor Sara Altshul O'Donnell swears by Cordyceps sinensis.

Nature's Turn-On? *Cordyceps sinensis*

This fungus is no gourmet delight: Cordyceps grows from spores that infect caterpillars. Not to worry. Due to its growing popularity as a medicinal herb, cordyceps is cultivated on rice and is available in capsule or extract form. Now there's enough promising research to excite experts.

"Cordyceps relieves mental exhaustion and aids recuperation from illnesses," says Douglas Schar, DipPhyt, MCPP, a London-based herbalist. "People usually start to feel better in 2 to 3 days," he adds.

Paul Stamets, author of *Growing Gourmet and Medicinal Mushrooms* (Ten Speed Press, 1993), says cordyceps can help with penile erectile dysfunction because it is a potent vasodilator—meaning that it improves blood flow.

Human studies, mostly conducted in China, show that cordyceps may be useful for treating liver diseases, impotence, high cholesterol, arrhythmia, and tinnitus. Studies conducted on mice show that it strongly inhibits tumor growth and has potential as an immune-system stimulant.

One downside to cordyceps is its high cost. A good supplement will run about $2 to $3 a day, says Schar. Cordyceps is available in health food stores and via mail order. Follow the dosage instructions on the label. •

Dr. Chung-Hu Tao performs acupuncture for Sharon Sanders's allergies—one of the many conditions that Chinese medicine successfully treats.

Discover the HEALING POWER of Chinese Medicine

Find out what herbs, acupuncture, and other Asian healing practices can do for you

A few years ago, Sharon Sanders, a 48 year old food writer and cookbook author from Center Valley, PA, had a bout of unusual abdominal pain that sent her running to her family doctor, and eventually to the ER.

"It turned out that a fibroid about the size of a 16-week pregnancy was growing outside my uterus," says Sanders. Her gynecologist recommended a hysterectomy. But Sanders didn't want surgery—especially when it might plunge her into early menopause. So when she saw a magazine article about Traditional Chinese Medicine (TCM) as a possible natural fibroid-buster, she decided to try it.

by Sara Altshul O'Donnell

Researchers at Memorial Sloan-Kettering Cancer Center in New York City, one of the premier cancer centers in the US, discovered that low doses of arsenic may be a lifesaving for a deadly form of leukemia. Their discovery was inspired by recent Chinese research, based on 2,500 years of arsenic's medicinal use in Chinese medicine.

Within four months of acupuncture and herbal treatments, her fibroid had shrunk by a third—enough to quell her symptoms and eliminate the need for surgery. As far as Sanders is concerned, her experience with TCM was a good one. So good, in fact, that she returned to her practitioner for more herbs and acupuncture—this time, for her allergies.

Chinese medicine may sound mighty strange. But this ancient healing art, which predates our own medical system by more than 2,000 years, has drawn the attention of western researchers who are finding some Chinese therapies surprisingly effective, especially for women. **From fibroids to hot flashes to even more serious illnesses, there's evidence that Chinese medicine may have something to offer that you can't get elsewhere.**

SHARON SANDERS'S gynecologist recommended a hysterectomy to cure her painful fibroid. Instead, she turned to Traditional Chinese Medicine. Four months later, her fibroid had shrunk enough to be problem-free.

Treating the *Whole* Person

The philosophy of TCM may take some time for the average person to understand, but the *theory* behind it is pretty simple—and appealing. Unlike conventional medicine, which treats the outward signs of a disease or disorder, **TCM practitioners believe symptoms are the result of an underlying imbalance—and that is what they attempt to fix.**

Like holistic physicians, TCM practitioners help you tackle lifestyle issues, especially stress and diet, that can contribute to your physical problems.

A TCM doctor won't just treat you for hot flashes or painful periods. He will look at what's going on in your whole life to help determine what treatment to recommend—and what changes *you* can make that will help relieve your symptoms.

"In fact," says Terry Courtney, a licensed acupuncturist and chair of the acupuncture and Oriental medicine department at Bastyr University in Bothell, WA, "there's a chance you could emerge from treatment feeling like a whole new woman."

Where Do I Sign Up?

Sound good? There *is* a rub: **Though you can take ginseng for energy and see an acupuncturist for your arthritis, TCM isn't really a do-it-yourself project. To get its full health benefits, you need a practitioner to diagnose and treat you.** And unless you live in or around a well-populated area, finding one might be tough. In 1995, there were about 12,000 practitioners in the US. By the turn of the century, there may be as many as 20,000. Many of them are Chinese, and in some cases, there may be a slight language barrier.

But, if TCM's focus on individual holistic treatments, natural therapies, and exercise intrigues you, read on. You can get referrals to certified practitioners from several sources. (See "Finding Your Own Dr. Tao," p 111.)

But *don't* fire your doctor. "Think of TCM as a *supplement* to the regular care you get from your doctor," says Courtney. Unless they are also qualified MDs—and there are some—TCM healers don't perform the pelvic exams, Pap tests, breast exams, mammograms, or other screenings you need.

Chinese herbal formulas are prepared specifically for each patient.

Here's What to Expect

In general, on your first visit, expect to be closely questioned about your health history. Depending on your problem, it's likely you'll receive an acupuncture treatment and perhaps some Chinese herbs your practitioner believes will help your specific imbalance. You'll also be given dietary suggestions, and maybe some advice about meditating or practicing tai chi or qi gong.

Here's how TCM works on some common problems that plague women, especially at midlife.

Day Sweats, Night Sweats... No Sweat

Linda Singer, 48, came to Bastyr University's Oriental Medicine Clinic hoping to ease the monsoon-style menopausal sweats that were making her life miserable. "Her doctor had taken her off hormone replacement

Australian researchers recently reported in the *Journal of the American Medical Association* that Chinese herbal formulations significantly relieved symptoms of irritable bowel syndrome, a painful condition that afflicts millions. As many as three-quarters of the individualized treatment group continued to benefit for 14 weeks after they stopped taking the multiherb formula.

therapy [HRT] because she had a strong family history of cancer," recalls Courtney. "She was a mess—the night sweats ruined her sleep, so she was exhausted all day, and the embarrassment of drenching herself at work made her really anxious."

Courtney saw Singer's problem as a classic imbalance between yin and yang. According to ancient Chinese science, yin and yang are the two opposing life forces. You need both, but they need to be in balance. Too much of one, not enough of the other, and you're headed for trouble.

Mainstream doctors believe that hormonal swings at menopause tamper with your body's thermostat, causing hot flashes and night sweats. But TCM practitioners have a different theory.

"Many menopausal symptoms are thought to be yin deficiencies. Yin is associated with coolness and moisture; its opposite element, yang, is associated with heat and dryness," explains Courtney.

Like other TCM practitioners, Courtney believes that as your body ages, its ability to produce yin energy diminishes. The yin depletion that results creates a sense of heat—a sort of "false fever." The treatment goal: to build and strengthen the yin energy to ease the menopausal symptoms.

Singer received five weeks of acupuncture treatments and took a Chinese herbal formula designed to correct her yin-yang imbalance. "By building and strengthening her body's yin and yang, Linda's night and day sweats began to subside," recalls Courtney. Singer was happy to report that her sleep improved and her overall energy was much higher.

"Though she discontinued the acupuncture after five weeks, she continued with several more weeks of herbal treatments to maintain her progress," says Courtney. "When Linda's under a lot of stress, she'll return for acupuncture to head off any recurrences."

"My Fibroid Shrank and I No Longer Need a Hysterectomy."

When Sanders decided to use TCM to shrink her fibroid, she visited Chung-Hu Tao, OMD, a TCM practitioner and licensed acupuncturist in Allentown, PA. He prescribed weekly acupuncture treatments and a custom-blended herbal formula.

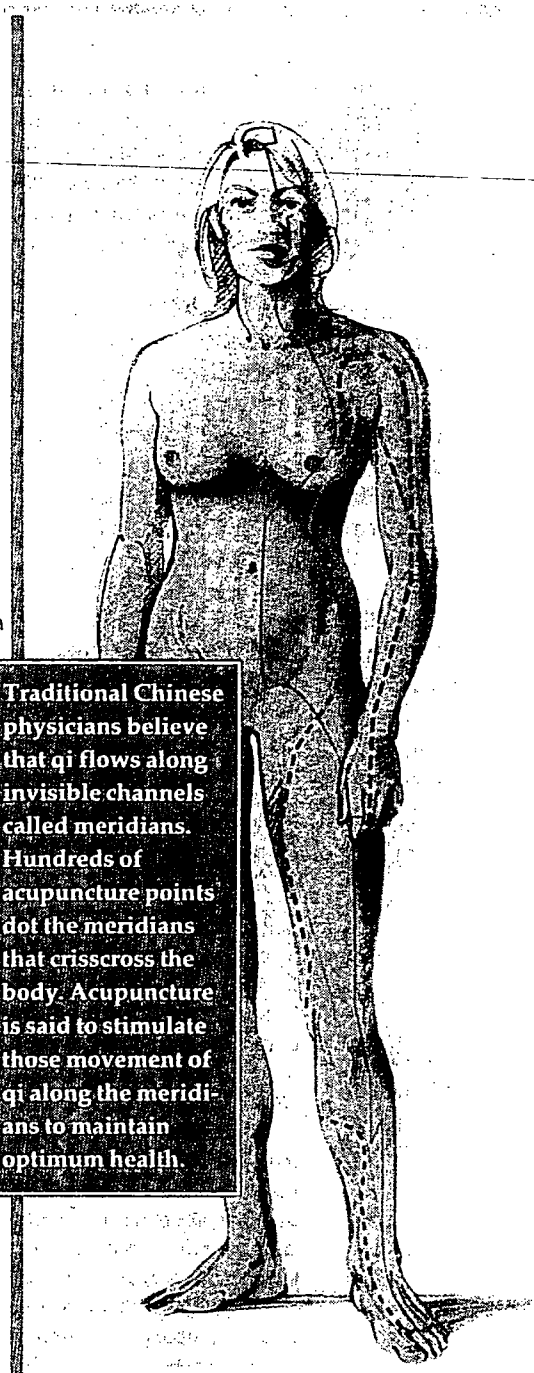
"Dr. Tao mixed about 20 exotic herbs—dried twigs, roots, and leaves—into paper bags. I was to boil a tea and drink a quart of it every day. It tasted so terrible that my daughters called it my 'evil brew,'" says Sanders. But she stuck with Dr. Tao's program. (She soon learned to flavor the tea with honey and lemon.)

Sanders monitored her progress to see whether the TCM was making a difference. She had a baseline ultrasound taken by a medical doctor at the beginning of the treatment. The fibroid measured 3.5 by 3.5 inches. Four months later, an ultrasound showed that the fibroid had decreased in size by a third, and Sanders was no longer in pain.

How did the TCM treatments shrink Sanders's fibroid? No one's exactly sure. "The amount of research on acupuncture is overwhelming, and the National Institutes of Health confirms that there's good evidence to use acupuncture for various forms of nausea and pain, including menstrual cramps," says *Prevention* advisor John Astin, PhD, Fellow in the Complementary and Alternative Medicine Program at Stanford University in Palo Alto, CA. "But I haven't seen any research about its effect on fibroids, possibly because no conclusive studies have been published."

What's more, it's hard to scientifically evaluate the action of complex herbal formulas, since many different active compounds could be involved.

And sometimes, fibroids shrink on their own, especially during menopause. According to *Prevention*



Traditional Chinese physicians believe that qi flows along invisible channels called meridians. Hundreds of acupuncture points dot the meridians that crisscross the body. Acupuncture is said to stimulate those movement of qi along the meridians to maintain optimum health.

ILLUSTRATION BY NAHUA LLIBO

Two years ago, a panel of experts convened by the National Institutes of Health concluded that acupuncture is an effective therapy for postoperative and chemotherapy nausea, as well as post-op dental pain. Other conditions for which acupuncture seems promising are asthma, osteoarthritis, menstrual cramps, back pain, headache, and stroke rehabilitation.

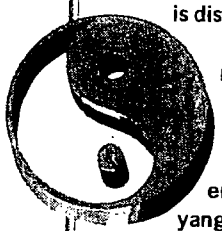
advisor Brian W. Walsh, MD, director of the Menopause Clinic at Brigham and Women's Hospital in Boston, fibroids usually occur when uterine muscle cells, genetically programmed to grow to accommodate a fetus, start growing when there is no pregnancy. "They become the clusters we call fibroids," he explains.

But Chinese practitioners have an entirely different take on the subject. "In Chinese medicine, we believe that fibroids are caused by 'stuck blood,' so we use treatments to get the blood and energy moving again," says Martha Benedict, OMD, a licensed acupuncturist and doctor of Oriental medicine from Santa Cruz, CA.

And that's precisely what Dr. Tao's plan was designed to do. He says the formula he created for Sanders included herbs that, according to Chinese medical tradition, boosted her circulation, softened the fibroid, and helped balance her hormones. During Sanders's initial acupuncture treatments, Dr. Tao applied the needles directly into her abdomen over the fibroid's location to remove "blockages of energy flow."

No matter how it worked, it *did* work. Sanders has now been symptom-free for more than a year.

May the Life Force Be with You!



Qi (pronounced *chee*) is the intangible force at the very heart of Chinese medicine. According to Chinese philosophy, qi animates life; without qi, there is no life. In your body right now, qi is flowing in a specific pattern. When its flow is disturbed, your health can suffer, say TCM practitioners.

The ancient Chinese arrived at the concept of qi by observing nature. They saw the way water and wind affected the earth, and concluded that the same invisible forces that power wind and water must also be at work within our bodies.

Chinese tradition holds that qi is expressed as two different energies: Yin is the cool, moistening aspect of our bodies, and yang is the life force associated with heat and dryness, says Terry Courtney, a licensed acupuncturist and chair of the acupuncture and Oriental medicine department at Bastyr University in Bothell, WA.

TCM treatments, such as acupuncture and herbal medicine, are designed to remove "blockages" of qi that may occur anywhere in the body. These blockages are said to cause imbalances that allow diseases to take hold.

Your Sex Life and TCM

Picture this: A 50-something couple walks into their local acupuncturist's office. He's got a shoulder injury, she's having headaches. The doctor says she can help them both.

After several weeks of acupuncture and herbal treatments, the couple report something unusual: Not only have their original complaints subsided, their sex life has improved too. Is this some kind of weird fluke?

Not at all, says Felice Dunas, PhD, a clinical Chinese medical practitioner from Topanga, CA, and author of *Passion Play* (Riverhead Books, New York, 1998). Dr. Dunas became interested in the connection between sex and TCM when she observed that many of the people she'd treated over the last 25 years for unrelated problems often told her they were enjoying sex more than they ever had before. It seems that as their physical conditions improved, their relationships grew stronger, their emotions were more stable, conflicts diminished, and habitual problems were seen in a whole new light—not to mention that their sex lives perked up.

"Chinese medicine is brilliant in its ability to improve your general health...and that can have a positive impact on your sex life," says Dr. Dunas. According to her patients, "those who said they felt nothing sexually begin to feel alive once more." What's more, the benefits of good sex extend way beyond the bedroom, says Dr. Dunas. Let's take that 50-something couple, for example. What has the improvement in their sex life meant to them?

"It's given them a sense of spirituality, peace, and compatibility," says Dr. Dunas. "Now, they have new goals and the desire to create something new together." •

Sara Altshul O'Donnell is Prevention's *alternative medicine editor. She is also the coauthor of* The Woman's Book of Healing Herbs *(Rodale Press, 1999).*

Finding Your Own Dr. Tao

▶ Choose a practitioner who's certified by the National Commission for the Certification of Acupuncture and Oriental Medicine. Cost averages $35 to $125 per visit; some insurance plans will cover acupuncture—check with your company.

▶ Call the American Association of Oriental Medicine, in Catasauqua, PA, for referrals to qualified practitioners: 610-266-1433; e-mail: aaom1@aol.com.

▶ Felice Dunas, PhD, a clinical Chinese medical practitioner from Topanga, CA, can also refer you to TCM practitioners, many of whom are experienced in dealing with sexual issues. Reach her referral line toll-free at 888-488-4325 or via e-mail: fdunas@ix.netcom.com.

7 Super Herbal Tonics ...to Keep Disease at Bay

"What's on the cutting edge of herbal medicine?" *Prevention* asked one of Europe's leading medicinal herbalists. His surprising answer: "Good old-fashioned tonics—herbal remedies you can take for weeks, months, even years to prevent diseases as varied as colds and cancer." ▸▸

by Doug[illegible] DipPhyt, MCPP
Photogra[illegible] Sterling Ruby

Super Herbal Tonics

I run a clinic and research facility in London, where I prescribe disease-preventing tonic herbs for many of my patients. For more than 10 years, I've researched, prescribed, and personally used tonics.

A century ago, taking tonics was as common as popping aspirin is today. Despite its popularity, though, tonic use died out. Why? Because the more cures medical science developed, the more people turned away from using tonic plants to prevent disease. Why bother growing and brewing echinacea to keep the kids sore-throat–free when you could run to the doctor and get an antibiotic? Tonics were abandoned for less time-consuming options.

But tonics are coming back into vogue. You may even be taking one. Ginseng, for example, has been used for thousands of years to improve endurance and enhance performance—and today, an NBA basketball star hawks it on US television. If you're like many people, you may take *Ginkgo biloba* on a daily basis to sharpen your smarts, boost your memory, and possibly prevent Alzheimer's. And while you're probably not making your own cold-stopping echinacea tonic anymore, chances are you've popped an echinacea tablet once or twice at the first sign of a scratchy throat or sniffle.

Some of these tonics are lifesavers—they may help you stave off or subdue killer diseases such as cancer and heart disease. Others just make life worth living—reducing menopausal symptoms or cutting short a cold that lays you up. What follows is based on scientific research, my own clinical experience, and that of my colleagues—as well as the feedback I get from our patients.

Note: If you have a serious condition, such as heart disease, cancer, or asthma, or if you suffer from allergies, see your doctor before using herbal remedies. Never stop taking your prescribed medication or substitute herbs for prescription meds unless your doctor says it's okay.

Douglas Schar, DipPhyt, MCPP

is a London-based herbalist specializing in disease-preventing herbal medicines. He has a Diploma in Phytotherapy, which is an herbal medical degree, and is a Member of the College of Practitioners of Phytotherapy. He is editor of the *British Journal of Phytotherapy*, Europe's oldest journal of herbal medicine, and has written several books, including *Thirty Plants That Can Save Your Life* (Elliott & Clark, 1993).

Dr. Schar has more than a decade's worth of experience prescribing and using tonics, and he's agreed to share those experiences, plus his medical knowledge, with us. For more info on herbs, see Dr. Schar's Web site: www.theherbalists.com.

Seven Top Tonic Herbs

Though herbalists use dozens of tonic plants to prevent and treat a wide variety of conditions, I've chosen to introduce you to just seven great herbs that target some of the most common health problems. You can find these herbs at local health food stores or through mail-order sources (see "Mail-Order Herbs" below).

Hawthorn may lower blood pressure.

The Heart Tonic

Hawthorn *(Crataegus oxyacanthoides)*

What I recommend it for: lowering blood pressure, preventing atherosclerosis (hardening of the arteries), and helping other circulatory problems such as varicose veins

Use hawthorn, and you just may beat the odds against heart disease, our number one killer. In Europe, hawthorn is considered a mainstream medicinal for strengthening the heart and blood vessels. I've used it successfully to lower blood pressure, ease angina, speed recovery from heart attacks or strokes, and prevent subsequent heart attacks and strokes.

What science says: Hawthorn can reduce blood pressure, a known risk factor for heart disease. It contains the antioxidant hyperin, which mops up free radicals, reactive agents that can damage the blood vessels and lead to atherosclerosis.

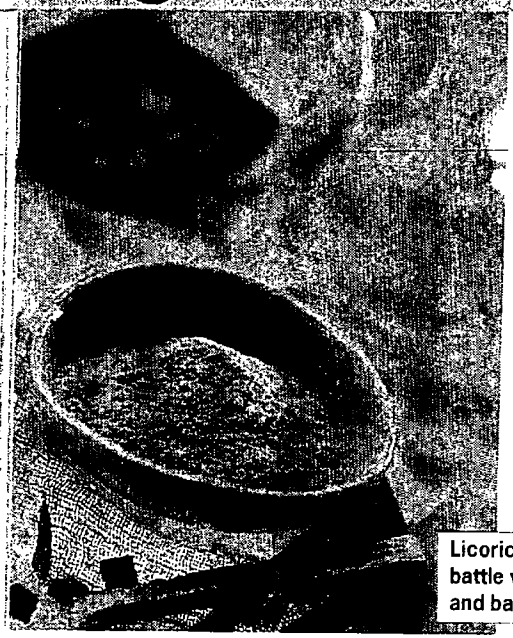
In addition, hawthorn contains rutin, which reduces plaque formation. As plaque deposits develop, they eventually block blood flow, which can lead to a heart attack or stroke.

Who should consider it—and why: If there's heart disease in your family, you may want to consider taking hawthorn now and using it every day. **It may strengthen your cardiac system and make it more disease-resistant.** In my experience, people with heart disease are greatly helped by hawthorn as well. I've seen blood pressure go down, angina ease, shortness of breath and ankle swelling improve, and an overall improvement in heart health and blood flow when people use this herb. Of course,

MAIL-ORDER HERBS

Blessed Herbs: 109 Barre Plains Road
Oakham, MA 01068 / 800-489-4372
www.blessedherbs.com

Maitake Products, Inc.: 222 Bergen Turnpike
Ridgefield Park, NJ 07660
800-747-7418 / www.maitake.com



Licorice may battle viruses and bacteria.

always talk to your doctor before taking an herb for a serious condition.

Varicose veins, hemorrhoids, and leg ulcers may also be improved with regular hawthorn use.

How to use it: Tea: Boil 1 tablespoon of dried berries in 1 cup water for 10 minutes. Drink 1 cup a day. Tablets: 300 mg daily. Tincture: 1 tablespoon daily.

The Respiratory Tonic

Licorice *(Glycyrrhiza glabra)*

What I recommend it for: fighting bacteria and viruses, and lessening symptoms of asthma and allergies

Whether the problem was asthma, chronic sinus infections, chronic bronchitis, allergies, or a tendency to coughs and colds, licorice was the first choice of the ancient herbalist—and it remains so for many herbalists today.

What science says: Licorice contains a wild cocktail of compounds that make the respiratory tract function better. Among them, glycyrrhetic acid, glycyrrhizic acid, and glycyrrhizin have been proven to reduce inflammation, fight viruses and bacteria, and counteract the symptoms of allergies and asthma, the latter of which can be life threatening. (Deaths caused by asthma have risen 117% in the last 20 years.) Licorice stimulates the part of the immune system responsible for attacking viruses.

Who should consider it—and why: In my experience, licorice can lower the frequency of colds, lessen asthma's severity, and reduce allergic reactions. If you have allergies, I suggest using licorice a month in advance of your personal hay fever season.

I believe that using licorice may even help prevent or lessen the severity of asthma attacks.

Caution: Licorice is not recommended for long-term use, especially for people with high blood pressure, as it has been known to raise blood pressure when used for long periods.

How to use it: Tea: Simmer a heaping tablespoon (about 4 g) of root, sliced or powdered, in boiling water for 10 minutes. Strain and drink hot daily. To save time, make 3 cups at once and reheat later in the microwave. Tincture: 1 tablespoon daily.

Doctor Takes His Medicine

I saw a 35 year old doctor whose hectic schedule reduced his resistance to infectious disease. He seemed to catch one viral infection after another from his patients. He started taking maitake, and after a month or so, his resistance seemed to improve. He's been taking it for a year now and has been totally bug-free.

The Immune-Boosting Tonic

Maitake *(Grifola frondosa)*

What I recommend it for: stimulating the immune system to fight bacteria, viruses, and cancer; preventing stress-induced flare-ups of hepatitis and herpes

Maitake is a mushroom-producing fungus found in North America, Europe, and Asia; Japan is the world's leading producer.

The health benefits of maitake were substantiated in cancer research in the early '80s when scientists learned that its ability to inhibit cancer in animals was due to a powerful stimulation of the immune system.

What science says: Research in both animals and humans suggests that maitake stimulates the white blood cells responsible for killing bacteria, viruses, fungi, and cancer cells. **Maitake seems to fortify immune system helpers known as interferon and interleukin, and it contains substances that directly inhibit bacteria and viruses.**

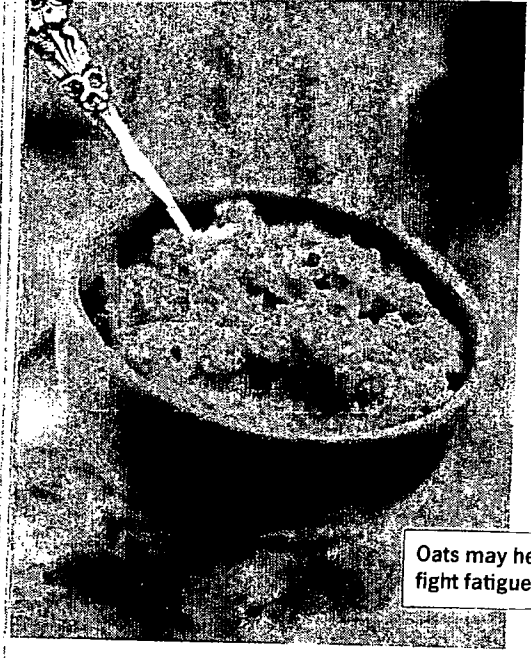
In a trial I'm currently supervising, 30 men with HIV, the virus that causes AIDS, have been using maitake for eight months. These patients have experienced increases in T-cell counts (an important disease-fighting cell), decreases in viral activity, and a reduction of the symptoms associated with the infection, such as night sweats, weight loss, and diarrhea. Many of the participants have gained weight and returned to work.

Who should consider it—and why: If you suffer from chronic tonsillitis, sinusitis, chronic urinary tract infections, or any recurring bacterial or viral infections, maitake may help keep these infections from recurring.

Anticipate a stressful stretch? Think about taking maitake now. It may prevent problems—such as colds and other illnesses that strike when your defenses are down—if you take it regularly and well in advance of a difficult time. People with viral infections such as hepatitis, herpes, and warts often have a recurrence when they're under stress and their immune function is

Licorice Licked Her Chronic Colds

After working with a particularly nasty group of chemicals, a 55 year old chemist developed chronic respiratory complaints. She was plagued by hay fever, allergies, long-lasting colds, and a bout of sinusitis. I prescribed licorice. After three months, she realized she wasn't picking up every cough and cold that floated around the office—and when spring rolled around nine months later, her allergies were a fraction of what they'd been before.



Oats may help you fight fatigue.

depressed. I recommend maitake to help people reduce the frequency of their symptoms.

How to use it: As a preventive, I recommend 2 g of maitake per day. I suggest taking 4 to 6 g a day when you're sick.

The Energy Tonic

Oats *(Avena sativa)*

What I recommend them for: restoring energy, reducing fatigue, improving thinking ability, speeding recovery from chronic illness or surgery, and boosting sex drive

Feeling constantly sapped? Got so much to do that you're frequently feeling the tingle of anxiety? Along with many other herbalists, I believe oats are the stamina tonic of choice.

What science says: Here's a case where science says very little, but centuries of herbal experience speak volumes. How oats work remains a mystery. However, ginseng *is* a well-known endurance tonic, and its active ingredients are derived from a group of compounds called ginsenosides. Oats contain avenacosides, which are chemically similar enough to ginsenosides to suggest that they may be a fatigue-fighting component.

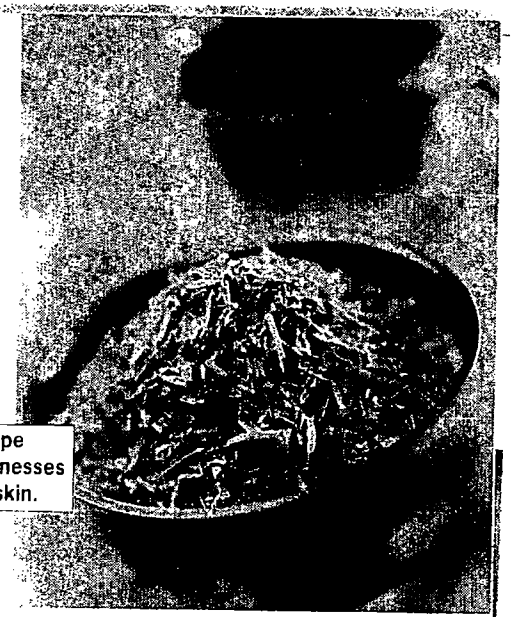
Indeed, one avenacoside (avenin) has been shown to work as a neuromuscular stimulant, which theoretically could enhance endurance.

Who should consider them—and why: I've found that oats seem to give busy people enough mental and physical energy to get them through their day. Afternoon fatigue tends to lessen, and clarity of thought tends to increase when people eat their oats.

In my opinion, oats are especially helpful for people recovering from surgery, serious disease, or viral infection, or suffering from the fatigue associated with chronic disease. And in a world where patients are sometimes discharged from the hospital before the anesthesia has completely worn off, oats can make an excellent energy-building food for convalescents.

Finally, **oats may be an excellent sex tonic, especially for people whose hectic lives leave their libidos limp.** Oats give both men and women a boost in sexual desire and satisfaction.

How to use them: Eat 1 cup of dry oats daily, made into 2 cups of oatmeal or even cookies! Or, use oat tincture made from the whole flowering plant (sometimes called "milky oats"). Tincture: 1 teaspoon morning and night.



Oregon grape may heal illnesses that affect skin.

The Healthy Skin Tonic

Oregon Grape *(Mahonia aquifolium)*

What I recommend it for: improving skin symptoms and the underlying diseases that cause them

Psoriasis, eczema, and acne: These three chronic skin diseases aren't life threatening, but they can certainly impair the *quality* of your life. Of course, there are medical treatments for skin problems—steroid creams quell eczema and antibiotics quiet acne—but when the medication stops, the problem often recurs.

Herbalists prefer to address the problem that lies *beneath* the skin condition rather than the symptom. And that problem is usually more than cosmetic. We believe it's often a sign of weakened immunity. Here's an herb that I believe targets the root of the problem.

What science says: This medicinal root is made active by two alkaloids, berbamine and berberine. Berbamine is an antihistamine with antibacterial action. It may stimulate the immune system and liver function. Berberine has been shown to be anti-inflammatory, anti-fungal, anti-ulcer, and effective against dandruff.

Who should consider it—and why: Many chronic skin diseases are autoimmune in origin, meaning that the immune system is attacking the body; often, several different problems can arise at once. When I consult patients with eczema and psoriasis, I often find that they're also troubled by chronic respiratory disorders, digestive disturbances, or joint problems. I believe that in these cases, Oregon grape is an ideal tonic. It can improve the skin problem

Oregon Grape Helped Her Save Face

A 27 year old woman consulted me about the chronic eczema she'd had since college. Her hands and arms were so badly affected that it made her self-conscious; it cast a shadow over her job and romantic prospects. She began taking Oregon grape, and in time, her condition improved to the extent that she no longer considers herself an eczema sufferer. But it took time: During the first three months the change was barely noticeable; but nine months later, the eczema was barely noticeable.

Black cohosh relieves menopausal symptoms.

as well as the associated respiratory, digestive, or joint problems.

Women prone to gallstones often have poor skin. In my experience, Oregon grape can reduce both their tendency to gallstones and its associated skin conditions. It may also improve skin problems associated with weak digestion, difficulty digesting fatty foods, and constipation—as well as the digestive problems themselves.

I've seen chronic skin conditions simply disappear when Oregon grape was used for prolonged periods of time. It may take a year or more for the condition to clear, though improvement may occur after three to six months.

How to use it: Tea: Add 1 tablespoon of dried root to 1 cup boiling water. Boil for 10 minutes, strain, and drink in the morning. To improve the flavor, add a handful of chamomile, which is also excellent for the skin and makes this skin tonic even more potent. Tincture: 1 tablespoon daily.

The Tonic for Women

Black Cohosh *(Cimicifuga racemosa)*

What I recommend it for: alleviating premenstrual symptoms, irregular periods, and menopausal symptoms

This American native plant was beloved by Native Americans, who used it to treat infertility, irregular menstruation, and menopausal symptoms.

What science says: A double-blind study of 80 patients compared black cohosh to conjugated estrogens (0.625 mg daily) and a placebo (sugar pill) over a 12 week period for their effects on menopausal symptoms. Black cohosh was the superior treatment for easing hot flashes, headache, joint pain, heart palpitations, sleep disturbances, and depression. In another trial, black cohosh beat a placebo for relieving hot flashes and vaginal dryness. Germany's Commission E considers black cohosh effective for treating PMS and painful periods, as well as nervous conditions associated with menopause.

Who should consider it—and why: I recommend this herb for women of all ages: those who have painful periods and those troubled by menopausal symptoms such as hot flashes. **Women who suffer terrible emotional ups and downs in connection with menstruation tell me that black cohosh is a lifesaver.** I also use it successfully for women who experience PMS-related problems such as depression, nervousness, and irritability.

At menopause, black cohosh can ease many of the symptoms without the side effects some women experience with hormone replacement therapy (HRT). And, unlike HRT, black cohosh is not associated with increased risk of breast or endometrial cancer.

How to use it: Tea: 1 tablespoon of dried root, covered with boiling water. Steep, covered, for about 10 minutes. Capsule: 40 mg a day. Tincture: 1 teaspoon a day.

The Man's Tonic

Saw Palmetto *(Serenoa repens)*

What I recommend it for: preventing changes in the prostate that can lead to impotence and urinary problems

Male "menopause" is subtler, slower, and far less noticeable than its feminine counterpart. As testosterone levels drop, muscle tone lessens and sexual drive wanes. The physical changes associated with reduced hormone levels may include prostate swelling, also known as benign prostatic hyperplasia, which results in frequent bathroom visits and difficulty emptying the bladder completely.

Here's the good news: I find that saw palmetto can slow the development of these symptoms.

What science says: The body manufactures testosterone *and* the enzymes that break it down at the same time. Compounds found in saw palmetto destroy those enzymes. The net result is that the testosterone produced by the body stays in circulation longer.

In clinical trials, saw palmetto improved the symptoms of reduced testosterone levels, such as prostate swelling. Saw palmetto also supports joints and muscles, which may help active men stay active well into their golden years.

Who should consider it—and why: In my experience, when men start using saw palmetto in their 40s, their prostates don't swell and their libidos don't drop. I encourage older men with prostate problems to use the herb to correct existing problems and stave off the possibility of surgery.

How to use it: Works best in tablet or capsule form. I suggest taking six 250 mg tablets of saw palmetto daily. Look for products standardized to contain 85 to 95% fatty acids and sterols. •

Lawyer Tries Black Cohosh

One of my patients, a young workaholic lawyer, began having irregular periods and symptoms of PMS. Her erratic cycle made her anxious, her anxiety began affecting her work, and she felt tired and drained. After a few months of treatment with black cohosh, her cycle regulated, her energy level improved, and she was better able to cope with her workload.

Can Herbs Fight Cancer?

Some visionary experts say yes. Here, *Prevention* takes you to the front lines of this new underground war on cancer

Call herbs the cutting edge of cancer research—the edge you don't hear about. It's not some hippie theory, but the new focus of reputable experts and labs across the country. From Rockefeller University to the National Institutes of Health, studies are underway looking for the effects of herbs—such as ginseng, turmeric, reishi mushrooms, and many more—on cancer.

Truth is, there's no evidence that any herb will *cure* cancer. Even few traditional treatments can make that claim. And, there are no definitive studies yet that *prove* that herbs alone have any effect against cancer. But there *is* mounting evidence that herbs may help

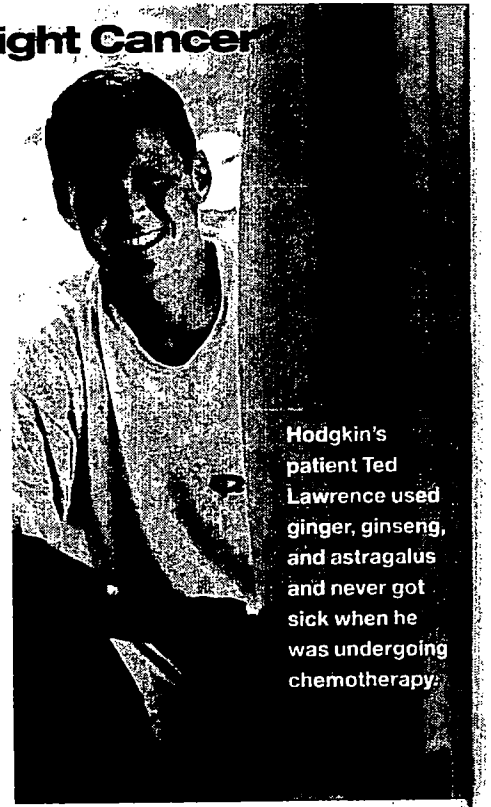
By Sara Altshul O'Donnell

Keith I. Block, MD, medical director of the Institute for Integrative Cancer Care in Illinois, believes herbs have helped his patients prevent their cancers from recurring.

Can Herbs Fight Cancer?

prevent cancer and work hand in hand with traditional cancer treatments, such as chemotherapy and radiation. This combined approach may improve life and, in some cases, inhibit the growth of certain cancers, says cancer researcher Charlotte Gyllenhaal, PhD, research assistant professor of pharmacy at the University of Illinois at Chicago. **Some pioneering physicians aren't waiting for conclusive proof that may be years away.** Based on anecdotal evidence—as well as a handful of promising studies—they're using herbs to bolster conventional cancer treatments *today*.

So why aren't you hearing more about herbal cancer research? The reason, as *Prevention* discovered, is that the subject is so new and controversial that many doctors who support the use of herbs in their own practice don't want to say so publicly for fear of censure by their more conservative colleagues. Here, *Prevention* takes a close look at this emerging field of cancer care.



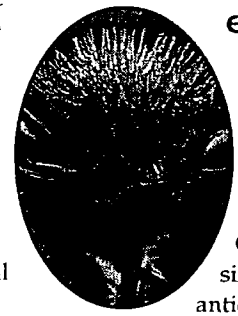
Hodgkin's patient Ted Lawrence used ginger, ginseng, and astragalus and never got sick when he was undergoing chemotherapy.

New Theory Is Emerging

Can herbal medicine help treat active cancer or prevent it from coming back? Right now, those are just theories—but they're backed by very promising evidence, says Keith I. Block, MD, medical director of the Institute for Integrative Cancer Care and Block Medical Center in Evanston, IL, and clinical instructor at the University of Illinois College of Medicine at Chicago. Dr. Block is one of a small group of outspoken supporters of herbs in the treatment of cancer.

Herbs may ward off cancer indirectly through their immune-stimulating properties. **But in recent years, researchers have begun identifying biologically active chemicals in plants that actually fight cancer, such as sulforaphane in broccoli and lycopene in tomatoes.** Herbs contain scores of these chemicals that may, like drugs, turn out to have a therapeutic effect. Several anti-cancer drugs are already derived from plants, most notably Taxol from the Pacific yew. In fact, some 25% of the medicines we use to fight illness every day were originally plant based, says Sidney Winawer, MD, head of the Laboratory for Gastrointestinal Cancer Research at Memorial Sloan–Kettering Hospital in New York City.

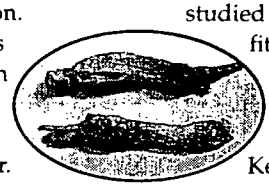
Herbs contain scores of chemicals that may, like drugs, turn out to have a therapeutic effect against cancer.



Milk thistle appears to protect against skin cancer in mice.

Most of these plant chemicals seem to work by *preventing* cancer, often by blocking a cancer-causing substance (carcinogen) from causing the cellular damage that triggers the disease. For example, studies of **garlic** and **onions** suggest they contain chemicals that make carcinogens easier to excrete from the body; they may also inhibit tumor cell reproduction.

Research also shows an association between people who eat garlic and onions and a lower risk of cancer. Dr. Block suspects that these plant chemicals and others may have helped patients prevent a recurrence of their cancer once conventional therapies worked.



Ginseng and ginger are used to eliminate nausea and fatigue that accompany conventional cancer treatment.

Here are other promising herbal cancer fighters:

- **Milk thistle** (*Silybum marianum*). In a study of this common weed at Case Western Reserve University in Cleveland, OH, researchers found that silymarin, the powerful antioxidant compound found in milk thistle, offered almost complete protection against skin cancer in mice that were exposed to known carcinogens. Other studies show that silymarin decreases the activity of carcinogens and has several other protective benefits.
- **Green tea.** Made from the unfermented leaves of the tea plant, *Camilla sinensis*, green tea is being studied for cancer-fighting benefits at both the University of Texas, M.D. Anderson Cancer Center, and Memorial Sloan–Kettering Cancer Center. Green tea contains catechins, substances that may have significant anticancer and antibacterial actions.
- **Ginseng.** Two animal studies are underway at the M.D. Anderson

PHOTO: STEVEN FOSTER; BOTTOM, MARTIN WALL

Can Herbs Fight Cancer?

Cancer Center to assess whether this traditional Chinese herb can slow the development of colon cancer. In Korea, people who use ginseng have a decreased risk of stomach cancer; other studies suggest that ginseng may have some cancer-protective benefits.

Relieving the Side Effects

If you have cancer, you're inevitably faced with a paradox: The treatment that could save your life can also make you sick. The two most common treatments, chemotherapy and radiation, can have debilitating side effects, including nausea, vomiting, fatigue, loss of appetite, mouth and skin inflammation, and hair loss. Chemotherapy can also batter your immune system, leaving you vulnerable to potentially life-threatening infections.

Some clinicians are using herbs to treat those side effects, often basing their treatments on studies that suggest they're effective for the *same* symptoms caused by *different* conditions. For example, ginger, the herb that tames motion sickness, is now being studied to determine if it will also keep a patient's stomach calm after chemotherapy—which is how alternative practitioners are using it.

Considering Herbal Medicine? Read This First!

If you or someone you love has cancer, you're vulnerable to unscrupulous hucksters—even MDs—who offer you false hopes that, in some cases, could make you sicker. Here's how to protect yourself:

- Make sure your oncologist knows about everything you may be taking. Many herbs can have unwanted interactions with cancer drugs. A good herbal practitioner should be happy to discuss his or her treatment with your doctor.
- Don't buy into flashy advertising campaigns, merchandising scams, or heavy-handed sales pitches. If anyone tries to sell you on a "miraculous" treatment, head for the hills.
- Steer clear of anyone who claims to have a secret herbal formula. Good herbal practitioners will tell you exactly what herbs they're recommending—and why.
- Be wary of promises of instant healing. Cancer recovery takes time. Expect yours to last between one and two years.
- Don't believe anyone who tells you to "Do what I say and nothing else." And run, don't walk, from anyone who tells you to stop conventional treatment in favor of any "cure," herbal or otherwise.

"I've used herbs to help the body deal with aggressive cancer therapies, and I've seen herbs ease the nausea, insomnia, and appetite loss that often accompany cancer treatments," says Donald Yance, a clinical herbalist in Oregon and author of *Herbal Medicine and Healing Cancer* (Keats Publishing, 1998), due out in November.

Aloe vera may ease the skin inflammation caused by radiation treatments.

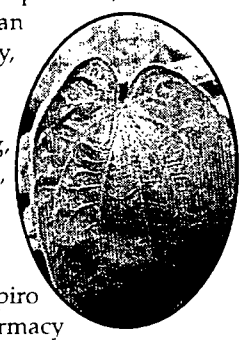
Radiation therapy produces its own side effects, one of the most common of which is a sunburnlike skin inflammation called dermatitis. Myles E. Lampenfeld, MD, a radiation oncologist from Berkeley, CA, and contributor to *The Chemotherapy and Radiation Therapy Survival Guide* (New Harbinger, 1998), says **aloe vera**, which has been tested on other kinds of burns and wounds, effectively promotes healing after treatment. It works best if it's fresh from the plant. But alcohol-free, 98 to 99% pure aloe gel products are effective too.

Aloe may also provide soothing relief for the mouth sores and inflammation caused by chemotherapy, says Tieraona Low Dog, MD, a family practice physician and herbalist at the University of New Mexico Hospital in Albuquerque. Look for pure "aloin-free" gel or juice (aloin-free means no latex, which can act like a laxative), available from health food stores, recommends Dr. Low Dog, who uses aloe with her cancer patients. Aloe may also indirectly improve a flagging appetite: When the sores are healed, you may feel more like eating, says Dr. Low Dog.

Anecdotal evidence suggests that herbs can play at least a supporting role in cancer treatment.

Calming Your Fears

Herbs may also ease the emotional symptoms—anxiety, depression, and insomnia—that can often hamper recovery, says Dr. Gyllenhaal.

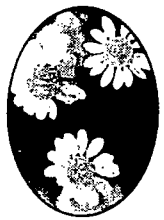


Kava lowers stress levels that can interfere with immune health.

Easing anxiety can be powerfully healing, agrees Marcy Shapiro, MD. An herbalist and physician now in private practice in Berkeley, CA, Dr. Shapiro created an herbal pharmacy for Montefiore Hospital in the Bronx that's being copied by other hospitals around the country. Her belief: Herbs can play a significant role in reducing the anxiety that the diagnosis

TOP: MARTIN WALL; BOTTOM: STEVEN FOSTER

Can Herbs Fight Cancer?



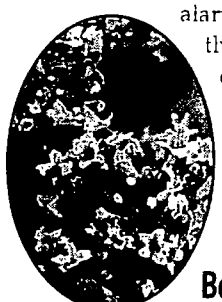
German chamomile: A pretty flower may help calm cancer anxiety.

and treatment of cancer often cause.

"When you ease stress, your immune system benefits," says Dr. Shapiro. "And when you're calm and relaxed, it's easier to engage in the mind/body therapies, like guided imagery and visualization, that are so powerfully healing, especially for people with cancer," she says.

One potential anti-anxiety herb is **kava** (*Piper methysticum*), a member of the pepper tree family that's been shown in clinical trials to ease moderate to severe anxiety.

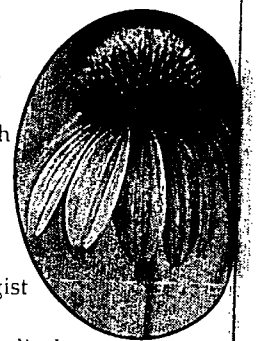
How it works is still a mystery. Researchers suspect it soothes an overactive amygdala, the brain's alarm center. Other herbs that seem to have power over stress and anxiety include **chamomile** and **valerian**, which are also used as sleep aids, and **milky oats** (*Avena sativa*).



Valerian may induce restful sleep and lower stress.

Boosting Immunity

Many of the herbs that alternative practitioners use are the immune boosters, on the theory that shoring up an immune system depressed by chemotherapy can give the conventional cancer treatments a chance to work.



Echinacea may help beef up the immune system to fight cancer cells.

And Yance has seen it happen. He's worked with numerous oncologists in the US, including Agnes Horvath, MD, a pediatric oncologist on the staff of the Eastern Maine Medical Center in Bangor.

One of her patients, a little boy with acute lymphoid leukemia, had gone into remission for two years. He then experienced a recurrence. He needed more aggressive drugs, which ravaged his immune system and left him fighting life-threatening infections for several weeks.

That's when Dr. Horvath called Yance. Working by phone and fax, they rushed to create an herbal therapy for the child.

One of the herbs chosen, among many others, was **echinacea** (*Echinacea purpura*). Studies suggest that echinacea may bolster the immune system, in part by strengthening the ability of what are known as "natural killer" (NK) cells to fight off infection. (NK cells also directly target cancer cells.) He also used **reishi mushrooms**, which have been found to significantly inhibit the growth of leukemia cells in mice. The herb/chemo combination seemed to work: The little boy went into remission again. "It was a frightening time, and it's hard to know what role the herbs played," says Dr. Horvath. "But I think they kept his body strong so that his quality of life improved while undergoing chemotherapy."

Ted Lawrence, a 33 year old marine electrician from Ft. Lauderdale, FL, believes herbs helped him fight off the nausea and fatigue that his original oncologist warned him would accompany the chemo treatments he was undergoing for Hodgkin's disease. However, with Dr. Block's approach, Lawrence says, "I never got sick, not once." And he felt so good, he was soon back at his favorite pastime—surfing.

Lawrence credits his remission to Dr. Block's program that combines conventional with nutritional, herbal, and other complementary therapies. Lawrence feels his quick recovery from chemotherapy and his vitality are due to **ginger, ginseng,** and **astragalus.** The latter two herbs are part of a specialized formula Dr. Block uses to boost the immune system and fight weakness in cancer patients undergoing traditional treatments. At least one study at the University of Texas Medical Center showed that astragalus can improve immune function in cancer patients undergoing chemotherapy, although it was limited to only 13 patients.

Reishi mushrooms inhibit the growth of leukemia cells in mice.

Herbs can play a significant role in reducing the anxiety that diagnosis and treatment of cancer often cause.

Tapping the Unharnessed Power of Self-Help

Don't expect conclusive proof for the therapeutic value of herbs any time soon. It could be years before researchers can translate their findings from mice to men. And some preliminary trials are just getting under way.

But as long as you don't regard them as magic bullets, you may want to try herbs to help support you while you're being treated conventionally.

"Think of your body as a garden. Think of chemo and radiation as your weed killers. Herbs are like nourishing fertilizer; they help create a strong, healthy soil in which flowers can grow," says Dr. Low Dog.

Sara Altshul O'Donnell is Prevention's *alternative medicine editor.*

For information on where to find herbal experts and support, see page 189.

Can Herbs Fight Cancer?

continued from page 123

Where to Get More Information

Here's how to find herbal experts, as well as other information and support. Note: Herbal medicine is an unlicensed healing modality. A professional herbalist should disclose his or her professional training and standards of practice to you.

AMERICAN ASSOCIATION OF NATUROPATHIC PHYSICIANS
601 Valley St., Suite 105
Seattle, WA 98109
206-298-0125
Web site: www.naturopathic.org
For $5, they'll send you a national directory, or you can see it free on their Web site.

AMERICAN HERBALISTS GUILD
PO Box 70
Roosevelt, UT 84066
435-722-8434; e-mail: ahgoffice@earthlink.com
Web site: www.healthy.net\herbalists
For $5, they'll send a directory of professional herbalists who have had their credentials evaluated by a peer review process.

CENTER FOR ADVANCEMENT IN CANCER EDUCATION
300 E. Lancaster Ave., Suite 100
Wynnewood, PA 19096
610-642-4810
Nonprofit; offers cancer information, counseling, and referrals; resources for cancer prevention and nontoxic approaches as adjuncts or alternatives to conventional treatment.

CENTER FOR COMPLEMENTARY MEDICINE
University of Pittsburgh Medical Center, Shadyside
5230 Centre Ave., Room 415
Pittsburgh, PA 15232
412-623-1365
Provides complementary treatments to chemotherapy, radiation, and surgery; including herbal medicine, guided imagery, bodywork, acupuncture, and other healing arts. •

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Gorman

Divider Title: _____

CHRISTINE GORMAN

Personal Time: Your Health Columnist, TIME

Christine Gorman joined TIME in September 1984 as a reporter-researcher. She became a staff writer in 1988 and a senior writer in 1998. She is assigned to the magazine's "Science" section where her primary responsibilities are covering medical and health news. Gorman also writes a weekly health column for the magazine's "Personal Time: Your Health" section. Recent stories have included the controversy over whole-body scanning, the possibility that coronary bypass surgery can have long term effects on mental acuity, and a potential link between wheat allergies and severe headaches. Her latest cover story was "How to Get Healthier (Even if You've Had Too Much Fun) and appeared in January of 2001. In December of 1996, she wrote the cover story for TIME's Man of the Year issue on AIDS researcher Dr.David Ho.

The oldest of three daughters of a French mother and an American father, Gorman graduated summa cum laude from Rice University in 1982, with a B.A. in English and Biology. In 1984, she received her M.A. from Johns Hopkins in the Program "Writing About Science." Gorman is fluent in French and counts travel, camping, two-step dancing and watercolors among her interests and hobbies.

Christine Gorman
TIME Magazine

CHRISTINE GORMAN

My name is Christine Gorman and I'm a senior writer at TIME Magazine, where my primary responsibility is to cover health and medical topics. We've definitely increased the amount of alternative and complementary medicine news in our magazine over the past five years--primarily because we think our readers are interested in learning more about these topics.

Our coverage generally falls into one of two categories--either we're reporting on a scientific study that delineates apparent benefits or risks of a complementary therapy or we run a "trend story" that examines thegrowing popularity of a particular supplement or practice.

When deciding whether or not to report on a scientific study of complementary medicine we use the same standards we use for allopathic medicine. We consider where the study was published, how well it was designed and we talk to outside experts in the field to determine both the context and plausibility of the results. In November of 1998, for example, the Journal of the American Medical Association devoted an entire issue to studies of complementary medicine. We reported on a double-blind, placebo-controlled trial that found some benefit to traditional Chinese herbal medicine in the treatment of irritable bowel syndrome.

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Schiller

Divider Title: _____

Susan Schiller

Susan Schiller
CBS Evening News

Susan Schiller is currently a producer at the CBS Evening News responsible for medicine and health coverage in addition to covering breaking news. Previously, she was Senior Producer of CBS This Morning where her duties included overseeing the health and medical unit. Ms. Schiller recruited the former head of the National Institutes of Health and current President of the American Red Cross, Dr. Bernadine Healy to serve as a consultant to CBS News on medical issues. In her capacity as a producer for CBS News she has produced reports on a wide range of medical topics including: Alzheimer's Disease, cloning, stem cell research, West Nile Virus, genetics, Attention Deficit Disorder, Parkinson's Disease, advances in spinal chord and heart research as well as alternative/complementary medicine.

Prior to joining CBS News in New York, Ms. Schiller held writing, producing and management positions at CBS owned television stations in St. Louis, Missouri and Philadelphia.

She has received numerous awards for her work including the American Women in Radio and Television Gracie Award in 2000 for a series on breakthroughs in fetal surgery. She has been honored by the American Heart Association, the American Cancer Association, the American Society of Dermatology, and the Epilepsy Foundation. Ms. Schiller has received 11 Emmy nominations for her work and won an Emmy Award for an investigation on fire safety in St. Louis housing.

Susan Schiller
CBS News

Mr. Chairman, Committee members thank you for allowing me to appear before you today. My name is Susan Schiller and I am a producer at the CBS Evening News with Dan Rather. I have been responsible for health and medicine coverage at CBS for nearly ten years at both the Early Show and currently the Evening News.

CBS News has a deep commitment to reporting on health issues. We know network television viewers rank health and medicine at the top of their "reasons to watch" list and as a topic, its more important to them than politics! They get more of their medical information from TV and other forms of media than they do from their own doctors. Stories on health and medicine directly touch the lives of our viewers and their families. As baby boomers age, and their own parents grow older, the appetite for health information continues to grow.

More Americans than ever before are turning to complementary and alternative medicine. They spend 15 billion dollars on herbs and vitamins in an effort to stay healthy. Alternative medicine is now mainstream.

Never before has the issue of complementary and alternative medicine been more central to our editorial process on what to report in the health field. What we cover and why can be complex.

At the CBS Evening News, we have tended to look at the issues of alternative and complementary medicine through a fairly critical journalistic lens. But sometimes, hard research is hard to come by. One of the most important areas of interest to the consumer: dietary supplements. Over the last decade, more and more people have started taking supplements as part of their overall wellness plan. Eating a well-balanced diet is considered the best way to get the essential vitamins and minerals needed for good health. But as Americans became obsessed with trying to improve their health, extend aging, fight cancer and cure the common cold the use of various supplements and herbs has exploded. Many viewers contacted us asking about the value of various forms of supplements. The problem was that our traditional forms of evaluating the legitimacy of the treatments were essentially non-existent in this area.

Typically, we've turned to the major medical journals as sources of information. These include: The New England Journal of Medicine, The Journal of the American Medical Association, the Lancet, among others. We know these journals have gone through rigorous review. We also turn to the NIH and other major medical research centers for information. But time and time again we learned that the same rigorous clinical evaluation of pharmaceutical drugs was not being conducted on dietary supplements. We found a lot of so-called "experts" making claims but often little evidence to back them up.

The Food and Drug Administration has limited authority over these products. On one hand, people pop supplements like candy thinking this vitamin or that herb will help them stay healthy. And if you can buy it off the shelf at the drug store or a health food store it can't be dangerous, right? But we found some products can actually be harmful, even kill. And what it says on the label isn't often reliable. Just this year, in evaluating independently a variety of supplements, some products contain less than the stated amount. Sometimes they contain other substances...like arsenic. In fact, the lack of regulation in this area appears to be a serious breach in public safety.

At CBS This Morning, now known as the Early Show, we did many reports on dietary supplements. We had a news/talk format which allowed us to address some of our viewers questions: What is St. John's Wort, Red Yeast, Echinacea, Saw Palmetto ? Did they work? Were they safe? Our medical correspondents were also physicians and could explain what we knew, what we didn't and heed a word of caution. But the Evening News is a hard-news broadcast based on facts and new advances. Did a treatment work or was it a placebo effect?

In 1998, when the New England Journal of Medicine published a study on the potential use of an herbal combination called PC-Spes for prostate cancer it was a watershed. The results were a way to demonstrate to the public that herbal medicines are powerful—as powerful as any prescription drug. It was used by prostate cancer patients in combination with conventional medicine or after conventional treatments had failed.

That study represented to some extent a sea-change in the attitudes of many physicians we spoke to. Previously when we would contact doctors, many viewed the world of alternative medicine with disinterest if not disdain. They considered it almost quackery. The reporting of this research in the New England Journal of Medicine gave not only this herbal supplement credibility but alternative medicine in general. It opened a door.

In the past five years or so, we have been inundated with press releases and materials pitching stories related to alternative medicine. Some go as far as claiming a cure for cancer. We still get press releases for shark cartilage. Often these come for various public relations firms hired by the company which makes a product. This is a big red flag to us. We still seek out research done by a major academic center or the National Institutes of Health because we believe that the results were properly researched regardless of the outcome. If it comes on a press release over the fax machine it will get a large degree of scrutiny.

Corporate sponsorship of research is another concern to us. In the past, studies that were funded by the corporate money were often disregarded. Inherent bias is obviously a concern. Today, many drug studies are funded by large pharmaceutical companies and we will often point that out in our report. However, in the area of alternative medicine,

there are relatively few double-blind, placebo controlled studies and they are often done in a small patient base. If the company that stands to benefit from favorable results paid for the research, we would take extra steps to insure that the research was done in a scientifically solid and unbiased way.

Why do we choose the stories we do? Clearly, complementary and alternative medicine is high interest to our viewers. We know the public is interested in advances for major medical illnesses such as cancer, heart disease and diabetes. There are some general guidelines that we follow: the first and single most important question is: what's new here? how significant is the finding, who will benefit –a large or relatively small group? If the advance is a treatment rooted in alternative medicine its as important in our mind as any new chemotherapy or heart procedure. In general, we don't target any specific racial or ethnic group but clearly in our reporting on medical findings ethnicity and race may be a factor.

Over the next few years, our reporting on alternative and complementary medicine will only grow. Congress has approved additional research dollars for this area of medicine. Consumers want more definitive answers. Can taking an Omega –3 supplement daily increase your protection against cancer or heart disease or both? Is ginkgo baloba really effective in maintaining memory? Is it false hope for an Alzheimer's patient?

Stories on complementary and alternative medicine are among the most interesting ones we do. On the CBS Evening News we've reported on the benefits of acupuncture for pain, neurofeedback for attention deficit disorder, magnetic therapy for depression and the power of prayer and healing. Just this month we reported on a new treatment option at a major medical center in New York. Holistic therapy combined with surgery. A strumming musician playing guitar right in the operating room as a woman is about to undergo surgery for breast cancer. Both the holistic therapist as well as the surgeon saw benefit in this combination of both complimentary and conventional medicine. For the patient undergoing her second mastectomy, it helped relieve her stress and helped her cope with a very difficult situation. While the guitarist may be an odd site in the o.r. today...tomorrow he'll be considered routine personnel in some procedures.

But we need to remember that while aromatherapy may not kill, other alternative medicine practices might. People often using alternative medicines along with conventional treatments and the combination may put them in a life-threatening situation. Some interfere with chemotherapy. Patients aren't always honest with their doctors about their use of alternative medicines. The interaction of medicines whether conventional or alternative is a serious problem.

At the CBS Evening News we will continue to investigate complementary and alternative medicine. We recognize that science is an evolving process.
As journalists we need reliable data to be reliable reporters. Consumers have a right to know about a treatment: does it harm, does it help or is it simply a waste of money?

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Neel

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Joe Neel

JOEL R. NEEL

JOE R. NEEL has reported on medicine and health for 20 years. Since 1995, he has served as Deputy Science Editor and Health Correspondent for National Public Radio. In these roles, he reports on numerous issues affecting health care and oversees coverage of medical and health policy issues for *Morning Edition, All Things Considered, Weekend Edition* and *Talk of the Nation.* Prior to joining NPR, Mr. Neel reported for *Physician's Weekly, Medical News Network,* International Medical News Group and *Modern Medicine.* He did graduate work in neurophysiology at Washington University School of Medicine and received bachelor's degrees in biology and German literature and language from Washington University in St. Louis.

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Huerta

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ELMER E. HUERTA, M.D., M.P.H.

Dr. Huerta was born in Perú, where he obtained his medical degree at the University of San Marcos in 1981. Trained in Internal Medicine and Medical Oncology in Perú, he moved to the United States in 1987. He completed a fellowship in oncology research at the Johns Hopkins Oncology Center in 1988. In 1991, he completed his residency in internal medicine at St. Agnes Hospital. Then, in 1992, Dr. Huerta received a Masters Degree in Public Health at the Johns Hopkins School of Hygiene and Public Health. He completed his fellowship in Cancer Prevention and Control at the National Cancer Institute, National Institutes of Health, in 1994.

Dr. Huerta is currently the founder and director of the Cancer Risk Assessment and Screening Center at the Washington Cancer Institute at the Washington Hospital Center in Washington, D.C. There, in addition to his clinical duties in cancer prevention and screening, he continues his research and educational work with the Hispanic community.

Dr. Huerta, who has 20 years of patient care and education experience, is nationally and internationally known by his efforts in educating the Hispanic community through the media. His popular radio program *"Cuidando su Salud"* (Taking Care of Your Health), has been on the air continuously in the Washington, D.C. metropolitan area since December 1989. Recently, the program has been nationally syndicated, and has become the only daily radio show produced and hosted by a Latino physician in the United States. The program is broadcast on more than 80 radio stations in the United States, Puerto Rico, El Salvador, Ecuador and Peru.

Another radio program, *"El Consultorio Comunitario"* (The Community Clinic of the Air), is the only talk show that is broadcast daily from a health facility. Radio America built a radio studio for him at his office, from where he broadcasts everyday.

Dr. Huerta has presented the results of his work at meetings sponsored by the National Institutes of Health Office of Women's Research, the National Heart, Blood, and Lung Institute, the National Cancer Institute, the American Public Health Association, the Pan American Health Organization, the National Center for Chronic Disease Prevention and Health Promotion, The Mayo Clinic, and The MD Anderson Cancer Center, among others.

In addition, Dr. Huerta co-hosts *"Hablemos de Salud"* (Lets Talk About Health), a weekly, live, one hour television program on health promotion and disease prevention that airs every Saturday on Channel 56 WNVC. The show is distributed throughout 23 cable systems in the Washington, D.C. metropolitan area, and has recently started its national syndication. He serves as an expert medical commentator for CNN Radio Noticias, Radio Bilingue, Univision, Telemundo, CNN en Español, and Telemundo International.

Dr. Huerta is the President and Founder of Prevención, Inc., a non-profit company dedicated to the production and dissemination of educational materials for the Latino community, in the United States. In addition, Dr. Huerta is Chairman of the Board of www.GraciasDoctor.com, a trilingual health-related web site.

Through his educational work, Dr. Huerta has developed a high degree of respect and trust in the Hispanic community at the local, national, and international level.

Dr. Huerta was appointed by President Clinton as member of the National Cancer Advisory Board, and is member of the National Board of Directors of the American Cancer Society, the National Coalition for Cancer Survivorship, the Cancer Research Foundation of America and the American Legacy Foundation.

Updated: January 2001

The White House Commission on Complementary and Alternative Medicine (CAM) Policy

INFORMATION, DEVELOPMENT AND DISSEMINATION

CAM in the Media: Newspapers, Magazines, Television, and Radio

Testimony by Elmer E. Huerta, MD, MPH
President and Founder, Prevención (*Wellness Through Media*)

March 26, 2001

Good morning, my name is Elmer Huerta. I am a physician by training, specializing in internal medicine, medical oncology, public health and cancer prevention. I appreciate this opportunity to share with you my work in the Hispanic community. I am the founder and director of the Cancer Risk Assessment and Screening Center at the Washington Cancer Institute at the Washington Hospital Center in Washington, D.C. I have been appointed by the White House as member of the National Cancer Advisory Board and by the Secretary of Health and Human Services as member of the Advisory Panel on Medicare Education. In addition, I am member of the National Board of Directors of the American Cancer Society, the National Coalition of Cancer Survivorship and the American Legacy Foundation.

While working diligently as a practicing physician, in my native Peru, I realized the importance of informing the public on important health issues, through the media. Immediately after my arrival to the United States in 1989, I started a daily radio show on a local Washington, D.C., Spanish-language radio station. That isolated effort evolved into the founding of Prevención (the Spanish word for prevention), a non-for-profit organization started in 1996. Currently, Prevención produces and distributes a daily radio show on more than 80 radio stations in the U.S., Puerto Rico, Canada, Ecuador and Peru. The show, "Cuidando su Salud" (Taking Care of Your Health) has become the only health-related, daily radio show produced and hosted by a Latino physician in the United States. In addition, Prevención produces a daily, one-hour radio talk show, a weekly one-hour, live television program, and an Internet page entitled, Prevencion.org.

I use the media with the following four principles: First, consistency, meaning daily presence, which is used for weather or sports. Second, comprehensiveness, meaning to cover all sorts of medical themes. Third, using all communication channels that are available for the community, including radio, television, the Internet and print media. And, finally, gaining my listeners' trust through my medical messages. I do this without promoting products or even my medical services, on my programs.

Complementary and alternative medicine is an issue that I take very seriously in my shows. There are many reasons for this.

- First, Hispanics are descendants of people who used many forms of what is now called complementary and alternative medicine. They used these remedies long before Columbus landed on this American land. Native American Indians, Aztecs, Mayans, Incas and many other aborigine cultures were owners of a rich and millenary medical tradition. Present day Hispanic Americans are only inheritors of that millenary tradition and of the distinctive conceptions of health and disease of those populations. A recent survey of 542 patients attending 16 family practice clinics belonging to a community-based research network in San Diego, California, showed that use of traditional folk remedies was associated with Hispanic ethnicity. (1) Another study examined the use of complementary and alternative medicine among Hispanic patients attending the Emergency Department at Columbia-Presbyterian Medical Center in New York. Results showed that almost half had used traditional and alternative medicine methods for their symptoms or another health problem in the past year, most commonly in the form of medicinal plants and teas. (2)

- Secondly, use of traditional and alternative medicine methods may represent an easier "alternative" to the "harder-to-reach", formal American medical system. A community with so many barriers for obtaining access to basic medical care, such as lack of information, linguistic isolation, lack of health insurance and fatalism, may find it easier to rely on complementary and alternative medicine methods, versus mainstream medical methods. For Hispanics, the use of complementary and alternative medicine methods is more a necessity than an alternative.

- Thirdly, due to the same barriers, especially the linguistic isolation, Hispanics are the ideal target of sophisticated media-based quackery. There are many modalities of these frauds. There are naturopathy practitioners that broadcast nationwide by using edited tapes, on which they talk with callers. They diagnose and treat all sorts of conditions with a line of their own, manufactured products. These products are often extremely costly and ineffective. Acupuncture is unnecessarily offered for many conditions. I wonder if the Federal Communications Commission has ever monitored Hispanic media.

Given this reality, I provide a constant amount of information on traditional and alternative medicine methods on my radio and television programs. I always try to frame my comments into the above mentioned reasons for Hispanics' use of complementary and alternative medicine methods. I tell them that I know they believe in those methods, as do I, but to be careful. I inform them that I have seen many cases of advanced diabetes, cancer, or other conditions unsuccessfully treated by herbs and teas, until it is too late for doctors to help. I tell them to use their herbs, their massages, their meditation or their homeopathic prescriptions, but to please take advantage of what we all know about the modern diagnoses and treatment of diseases.

I select topics mainly from medical journals and articles published in respectable mainstream press media. I summarize the article, writing it in Spanish at a sixth grade literacy level. Occasionally I rely on other medical experts. Frequently, however, I talk to my many Hispanic patients about complementary and alternative medicine methods. They always give wonderful insight on these issues. I produced a ten show series based on the articles on complementary and alternative medicine methods, which were published in the November 11, 1998 Journal of the American Medical Association. I always try to balance the positive and negative results on complementary and alternative medicine methods. For example, I have written about reports on magnetic fields in relieving certain types of back pain, or the dangerous side effects of Gingko biloba.

Prevención does not have corporate sponsorship. When occasional pharmaceutical support has been accepted, an unrestricted educational grant is the only form of accepted support. No mention of the pharmaceutical companies' names is made on air. I would estimate that 90 percent of my work is done on a voluntary basis.

My target audience is the recently arrived Hispanic immigrant. Recent census data confirms that there are millions of Hispanics that fall into this category. My mission is to provide these recently arrived, hard working people with the necessary knowledge to prevent and detect disease, and not let them be the victims of organized quackery. I have seen modest laborers paying 700 dollars a month for some herbs, tonics and vitamin supplements.

Given the undoubted advance of complementary and alternative medicine methods, I will probably include more programs on this issue. They will always be framed on the principles described before.

I respectfully suggest the Commission to ask the Federal Communications Commission to carefully monitor Spanish-language media to break organized quackery. In addition, I would suggest designing and implementing programs to increase access to good quality medical care for the Hispanic population.

(1) The Use of Complementary and Alternative Medicine by Primary Care Patients. Lawrence A. Palinkas, Ph.D.; Martin L. Kabongo, MD, Ph.D.; The Journal of Family Practice. December 2000. Vol. 49, No. 12.
(2) Use of Complementary and Alternative Medicine Among Hispanic Emergency Department Patients. Am J Em Med 2000, 18: 51-54

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Rainie

Divider Title: _____

Harrison "Lee" Rainie is the Director of the Pew Internet & American Life Project, a research center that is fully funded by the Pew Charitable Trusts. Its mission is to analyze the social impact of the Internet – that is, how the Internet is affecting families, communities, education, civic/political life, health care, and work places.

During 2000, its first year of operation, the project issued 14 reports that dealt with such things as Americans' attitudes about trust and privacy online, the impact of people's use of email on their relationships with their family and friends, the way that Internet users act on the health information they get online, the impact of the Internet on campaigns and the election, the reasons why people did not have Internet access, the special ways that African-Americans use the Internet, the impact of the Internet on wired churches, and the use of file-sharing programs like Napster. The reports were covered by the New York Times, Washington Post, Wall Street Journal, Los Angeles Times, Chicago Tribune, Boston Globe, Miami Herald, Atlanta Journal-Constitution, Time, Newsweek, U.S. News & World Report, the major network and cable newscasts, National Public Radio, and scores of other major newspapers, radio stations, and magazines. Project staff have testified before several panels at the federal Department of Health and Human Services and been asked to brief dozens of local, state, and federal officials about the project's research.

Prior to receiving the grant, he was managing editor of U.S. News & World Report. During his 12 years at the magazine, he edited stories in several departments including the magazine's online operations, its national news section, and its culture and social trends section. Over those years, eight of the stories or special editions of the magazine that he edited were finalists for the National Magazine Award, the magazine industry's equivalent of daily journalism's Pulitzer Prize. He has appeared on numerous television news shows as an analyst and commentator on national affairs.

Prior to joining U.S. News, Rainie was chief of staff to Sen. Daniel Patrick Moynihan, Democrat of New York, and a political reporter at the New York Daily News.

Rainie is a graduate of Harvard University and has a master's in political science from Long Island University. He sits on the advisory boards to the communications departments at the University of Minnesota and Elon College in North Carolina. He is also on the advisory board of NASA's Mars Public Engagement Program.

Rainie is married and has four children.

Testimony to the White House Commission on Complementary And Alternative Medicine Policy

By Lee Rainie
Director -- Pew Internet & American Life Project
March 26, 2001

Good afternoon. My name is Lee Rainie and I am the Director of the Pew Internet & American Life Project, a research organization fully funded by the Pew Charitable Trusts to do nonpartisan analysis of the social impact of the Internet. One of the major goals of the project is to assess the way Americans are using the Internet to get health information. Towards that end, the project has done several surveys of Internet users, one of them specifically focused on those who seek health information on the Web. We released those findings in November in a report entitled "The Online Health Care Revolution: How the Web helps Americans take better care of themselves." I have submitted a copy of that report for the record.

Our work on health care pertains to the activities and attitudes of Internet users, rather than to analyzing online health content, so I will focus my remarks on how users' experiences and expectations are relevant to your work. You will find that my comments add up to an encouragement that you consider Internet users as a distinct contributor on e-health issues.

AN OVERVIEW OF THE E-HEALTH UNIVERSE

Almost 60 million American adults, or 57% of those with Internet access, have used the Web to get health or medical information. More than 6 million adults are getting such information on an average day. We call them "health seekers" and a majority of them go online at least once a month for health information. We have just come out of the field with a survey of teenagers and found that more than a quarter of children between ages 12 and 17 have consulted Web sources for health, fitness, and dieting information. (It's something girls do much more than boys, I should point out.)

The reason for all this activity is simple: Half of health seekers say access to information on the Web has improved the way they take care of themselves many report that the material they gather directly affects their decisions about getting care and treatment for their illnesses or the illnesses suffered by someone they love. In an era when many are not satisfied with the availability of their doctors, they are turning to the Web to provide the information they find hard to get from their caregivers. They are also increasingly interested in participating shared decision-making.

HELP IN FINDING THE BEST INFORMATION

Perhaps the most important thing to know is that health seekers go online in a very action-oriented frame of mind. They are anxious to get information that will help them make important, even at times life and death decisions. In many cases, they feel they are getting more information about illness, prognosis, and treatment options from Internet sources than they are from medical professionals. Yet, even as they take this information to heart, 86% of health seekers say that they worry about getting health information from an unreliable source

online. This suggests that you would be making a vital contribution by fostering reliable guides to the best information.

Too often, health seekers are stumbling around cyberspace unaided. Fully 81% of health seekers told us they found the information they wanted through an Internet search, rather than through a search assisted by knowledgeable helpers. And 64% of health seekers say they had never before heard about the Web sites they ended up consulting. Since the majority of health seekers went online for information right before or right after a doctor's visit, there is an opportunity for health-care providers or other trusted intermediaries to supply lists of accurate and patient-friendly sites and guidance on sophisticated search strategies.

Under many circumstances now, patients get the exact opposite message from providers: "You are not helping yourself by getting more information and you are pestering me with all these Web printouts you want me to look at. I don't want to be bothered."

Dr. Tom Ferguson, the senior fellow for health research at my Pew Internet Project, argues that the places on the Internet where the most powerful searching and learning occurs are not necessarily health sites, but the disease-specific online communities and the disease-specific sites run by patients with condition X for other patients (and family members) of those with condition X. Within these forums, discussion of alternative and complementary approaches is most common for diseases in which conventional care has the least to offer and/or in which cultural mismatches between providers and patients make it harder for patients to get the kind of care they would like to get.

While opinions that many health professionals would probably label as "inaccurate" or "misinformed" are occasionally posted, (not as often as you might think because support group communities are impressively "expert" places), they almost never go unchallenged or uncorrected. In many cases differences of opinion boil down not into "right" and "wrong," but rather differing biases for a particular type of or approach to treatment. For instance, some end-users consider themselves "anti-drug and pro-natural" and consider most health professionals to be unconsciously "pro-drug" and "anti-natural." Thus by their lights they would prefer to begin with "natural" remedies and use "drug" remedies only as a last resort.

This suggests that efforts to encourage users to contribute to the assessment of online information would be a useful addition to the efforts that are being made by providers to establish ethical and quality standards for online health sites. Dr. Ferguson has done research suggesting that well-mediated and robust disease-support communities can often provide online health seekers more in-depth information, more details about cost-effective treatments, more emotional support, and more practical information about coping activities than professional health providers can. Of course, patients continue to say that doctors are better than support groups at diagnosing illness and setting up illness management regimes.

The other Internet sources for information quality assessment are the so-called qualityware search engines like google.com and consumer-oriented sites exemplified by gomez.com and epinions.com. The health-site report cards and ratings compiled by the staff *and* site users are a powerful resource for those asking fundamental questions: What are the best sites for my condition?

PRIVACY CONCERNS

Most users go to health sites for research and reference purposes and have been able to get the information they need without making any significant trade-offs by giving up personal information. Only 21% have volunteered their email address to a health Web site. Anonymity – or, at least, the *feeling* of anonymity – is enormously important to health seekers: 80% say that is one of the major appeals of getting health information on the Internet. A user can hunt for information on a sensitive subject and nobody has to know about it.

That partly explains why Internet users so strongly fear the prospect of such information falling into others' hands. A certain amount of shame might be a cause, but there are practical worries, too. Some 85% of health seekers are concerned that their insurance company might change their insurance status or raise rates if the firm finds out what Web sites a health seeker has visited. More than half of health seekers fear their employers might find out what sites an employee has visited and take action. This concern about privacy extends to the idea of online medical records: 63% of health seekers say that putting medical records online is a bad thing, even if the records are on a secure, password-protected site, because they worry about other people seeing their personal information.

Our sense is that this apprehension about medical privacy can be reduced. First, some of it will vanish as more and more people get more online experience. Those who have been online for several years exhibit noticeably less concern about privacy violations, probably because they have not had any problems and learn how to take steps to protect their privacy. Second, even with these expressed concerns about privacy, many Internet users have already shown that when the information-transaction suits them, they are willing to give up personal information in return for access to content that matters to them. My personal opinion is that if a doctor told her patients that creating an online medical record would result in better care, many would swallow their privacy fears and allow the record to be created. Third, many of these worries would dissipate if users were given assurances through anti-discrimination laws that information from their online medical searches could not be used against them on the job, in their insurance status, or in other key aspects of their lives. Concerns would also drop considerably if real penalties put in place for privacy breaches.

NEXT STEPS

Our surveys suggest consumers and patients would appreciate this from you:

1) Encourage "buy in" from the medical establishment. Patients are going to hunt for medical information online whether their doctors sanction these searches or not. Internet users would like trusted allies to help guide them on these searches and no one should be better qualified to do that than providers. There is abundant evidence, too, that patients would love more opportunities for email interaction with their providers as well as the capacity to perform other online transactions with their providers such as appointment scheduling, prescription refills, and lab test reports.

2) Encourage transparency and patient privacy awareness. One of the reasons privacy fears run high is that Internet users don't know what is happening: 56% of Internet users don't know what a cookie is, don't know how to set the preferences on their browser, and don't

know the basics of tracking and profiling. They would appreciate education and technology tools to give them a better sense that they are in charge of their personal information and that they know what is being done with that information.

3) Facilitate methods for patients to apply their own expertise to online health matters. Internet-based support groups can play a very constructive role in providing advice to others about what web sites to visit, how to assess the validity of online information, and how to deal with illnesses. Their emergence online is one of the most important developments in health care. They embody the best open-source features of the Internet and the best kind of online communities.

APPENDIX – ONLINE SUPPORT GROUPS

It's not always easy for visitors to just "drop in" on online support groups. First, they are rather like ongoing dinner parties and sometimes construct protective defenses against casual browsers. The technologies that support them also sometimes require cumbersome signup protocols, and passwords. Second, once you do "get in," it sometimes takes time to learn the peculiarities of the technical interface and/or the culture protocols and "netiquette" of each individual group.

Nonetheless, there are some easy and convenient ways of checking out postings on some of the online support groups. Here are a few starting places:

(1) Observers can check out the back issues of the ALS Digest (a support group for Amyotrophic Lateral Sclerosis -- Lou Gehrig's disease) at:
http://www.alslinks.com/alsdigestarchives.htm

(2) CancerHelp provides a gateway to a number of different cancer-related support groups:
http://cancerhelp.8m.com/

(3) To find a link to a support group on a specific topic, go to:
http://dmoz.org/Health/Consumer_Support_Groups/

(4) Another way to find a self-help group on a specific topic, log onto www.google.com and do a search for <name of condition> plus "support group."

Pew Internet & American Life Project: Online life report

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The online health care revolution:
How the Web helps Americans take better care of themselves

Principal authors: Susannah Fox, Director of Research, Lee Rainie, Director

John Horrigan, Senior Research Specialist
Amanda Lenhart, Research Specialist
Tom Spooner, Research Specialist
Maura Burke, Research Assistant
Oliver Lewis, Research Assistant
Cornelia Carter, Manager

The Pew Internet & American Life Project
1100 Connecticut Avenue
Suite 710
Washington, DC 20036
202.296.0019
http://www.pewinternet.org/

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Our two projects will also issue a joint report in the coming months that will assess the implications for the Internet health community – both consumers and companies – of the health-privacy rules that will soon be issued by the federal Department of Health and Human Services.

The Health Privacy Project is located at:

The Institute for Health Care Research and Policy
2233 Wisconsin Ave., NW, Suite 525
Washington, D.C. 20007
202-687-0880
email: goldmajl@gunet.Georgetown.edu
http://www.healthprivacy.org/

SUMMARY OF FINDINGS

The Internet's powerful influence on "health seekers"

Fifty-two million American adults, or 55% of those with Internet access, have used the Web to get health or medical information. We call them "health seekers" and a majority of them go online at least once a month for health information. A great many health seekers say the resources they find on the Web have a direct effect on the decisions they make about their health care and on their interactions with doctors.

- 48% of these health seekers say the advice they found on the Web has improved the way they take care of themselves; and 55% say access to the Internet has improved the way they get medical and health information.
- 92% of health seekers say the information they found during their last online search was useful; 81% said they learned something new.
- 47% of those who sought health information *for themselves* during their last online search say the material affected their decisions about treatments and care. Half of these health seekers say the information influenced the way they eat and exercise.
- 36% of those who sought health information *for someone else* during their last online search say the material affected their decisions on behalf of that loved one.

The specific impact

For the 21 million health seekers who say they were swayed by what they read online the last time they sought health information, the impact was as follows:

- 70% said the Web information influenced their decision about how to treat an illness or condition.
- 50% said the Web information led them to ask a doctor new questions or get a second opinion from another doctor.
- 28% said the Web information affected their decision about whether or not to visit a doctor.

For illness, including mental illness, more than for fitness

The Internet is a tool for the sick more than it is an educational resource for those who want to stay well.

- 91% of health seekers have looked for material related to a physical illness.
- 26% have looked for mental health information.
- 13% have sought information about fitness and nutrition, 11% have sought basic news about health care, and 9% have sought information about specific doctors, hospitals, or medicines.

For research, more than interaction with providers

Most users go to health sites for research and reference purposes. Few use it to communicate with their caregivers or to buy medicine. Most health seekers have been able to get the information they need without making any significant trade-offs by giving up personal information. Thus, it is not clear whether most Internet users will embrace a full range of health-care activities online, such as filling prescriptions, filing claims, participating in support groups, and emailing doctors.

- 9% of health seekers have communicated with a doctor online.
- 10% have purchased medicine or vitamins online.
- 10% have described a medical condition or problem in order to get advice from an online doctor.
- 21% have provided their email address to a health Web site; 17% have provided their name or other personal information.

A tool for family members seeking help for ailing loved ones and friends

A great many are using the Web to gather information on behalf of family and friends. Those who are in excellent health often seek material to help someone else; those who are in less-than-excellent health are more likely to be hunting for information for themselves.

- 54% of health seekers say they were searching for information on behalf of someone else, including their children, their parents, and other relatives, during the most recent time they went online for health information.
- 43% of health seekers were looking for information for themselves during that most recent visit.

Accessing the Web: A way to get a second opinion

When it comes to the most recent time they used the Internet to get health information, most health seekers focused on getting information about an immediate medical problem. And the majority got information in conjunction with a doctor's visit.

- 70% of health seekers said they went online for information about a specific illness or condition the last time they consulted the Web for health information; 11% were checking out news related to health care, 9% were seeking information about specific doctors, hospitals, or medicines.
- 61% of those who sought information for themselves and 73% of those who sought information for others turned to Web resources in connection with a visit to the doctor.

More often than not, health seekers consult Web resources after they had been to a doctor, and, presumably after a diagnosis has been given. But the timing of the Web search also depends on the person who is sick. If a health seeker is looking for information on behalf of a loved one, she is very likely to go online *after* a doctor's visit, perhaps to get more information related to the diagnosis. If she is looking on behalf of herself, she relatively likely to go online *before* the doctor's visit, perhaps to

see what the diagnosis might be. Only a small percentage of health seekers use the Web in lieu of a doctor's visit.

Why health seekers like the Internet

They appreciate the convenience of being able to seek information at any hour, the fact that they can get a wealth of information online, and the fact that they can do research anonymously.

- 93% of health seekers say it is important they can get health information when it is convenient for them.
- 83% of health seekers say it is important to them that they can get *more* health information online than they can get from other sources.
- 80% of health seekers say it is important to them that they can get this information anonymously, without having to talk to anyone; 16% of health seekers said they had used the Web to get information about a sensitive health topic that is difficult to talk about

Health seekers fear privacy violations

Health seekers are very anxious to have their privacy protected. They are afraid of Web sites selling or giving away information about them, about insurance companies learning what they have done online and making coverage decisions based on that, and about their employers learning what they have done. Among the most sensitive to privacy violations are African-Americans, parents, and Internet newcomers (those who first came online less than six months ago).

- 89% of health seekers are concerned that a health-related Web site might sell or give away information about what they did online; 71% are "very concerned" about such privacy violations.
- 85% of health seekers are concerned that an insurance company might raise their rates or deny them coverage because of the health sites they have visited; 72% are "very concerned" about this possibility.
- 52% of health seekers are concerned that their employer might find out what health sites they have visited. This ranks comparatively low in part because most health seekers are getting their information online from home.
- 63% of health seekers and 60% all Internet users think that putting medical records online is a bad thing, even if the records are on a secure, password-protected site, because they worry about other people seeing their personal information. The rest think it's a good thing because they and their doctors would have easy access to patients' medical records.

Privacy policy issues

Despite these public sentiments, the health-information privacy regulations soon to be released by the Clinton Administration will probably not cover the majority of the nation's more than 17,000 health-related Web sites. Analysis by the Health Privacy Project suggests that many Web sites do not clearly fall into the three categories of organizations that are covered by the regulations – health care providers, insurance

companies, and health data clearinghouses (the organizations that process and transmit insurance-claim data). Many of the most common features of health Web sites will not be covered: health assessments, applications for clinical trials, chat rooms and bulletin boards, and personal management tools such as online disease management and patient-generated "medical records." In the future, health seekers want protection and the right to punish companies that violate their privacy policies.

- 81% of health seekers think people should be able to sue a health or medical company if it gave away or sold information about its Web site users after saying that it would not.

Health seekers also fear getting inaccurate information

The credibility of health information and health advice on the Internet is also a concern. One major reason is that most health seekers are doing general Internet searches for the material they need, rather than relying on recommendations about Web sites from health providers or friends. Compared to other Internet users, health seekers show greater vigilance in checking the source of online information. Health seekers are pretty evenly divided about whether the information they get online is credible.

- 86% of health seekers users are concerned about getting health information from an unreliable source online.
- 81% of health seekers found the information they wanted through an Internet search, rather than being directed by someone. And 64% of health seekers say they had never heard about the Web sites they ended up consulting before they began the search. 30% of health seekers checked out four or more Web sites during their most recent search.
- 58% of health seekers checked to see who was providing the information at the Web sites they visited the last time then went online for health-related material.
- 52% of users who have visited health sites think that "almost all" or "most" health information they see on the Internet is credible; 44% think that they can believe only "some" online health information.

How women and men differ

Women are much more likely than men to seek online health information. Women are more likely to register strong feelings about the benefits of online searches, especially those related to the wealth of information online and the convenience of online searches. And women are more likely to worry about getting unreliable information from the Web. Asked about their most recent search for medical and health information, women were more likely than men to be seeking material related to a specific illness, to be hunting for material related to symptoms, and to be conducting the search after a doctor's visit. Women are twice as likely as men to be seeking material for a child. However, men and women were equally likely to be seeking information on behalf of a parent or other relative.

When men look for information about a specific illness, they are more likely than women to look for material about their own condition and they are more likely to report that their Web search affected their decisions about how to treat the illness. Men are more likely to be seeking material about what happens to someone during an illness and when certain treatments or drugs are administered. They are also more likely than women to have used the Web information they gathered to ask follow-up questions of a medical professional. Men's and women's attitudes about privacy are very similar. However, compared to women, men are slightly more privacy-conscious; they are more likely to have read a Web site's policy. And men are somewhat more eager to take advantage of the fact that they feel anonymous online; they are more likely to have used the Web to search for information about sensitive health issues.

MAIN REPORT

Introduction

There is abundant evidence that use of the Internet has played a role in revolutionizing the more than $1 trillion health care industry in America. Doctors, hospitals, health maintenance organizations (HMOs), insurance companies, and Internet firms are using the Internet to retool the business of medicine. More and more health care providers are interacting with their colleagues via email and are interested in using email and the Web to interact with patients, to locate the most current literature on the effectiveness of specific treatments, and to conduct research themselves, sometimes in collaboration with colleagues on the other side of the world.

At the same time, the surveys of the Pew Internet & American Life Project show that the Internet has become a valued source of health-care information for a substantial number of Internet users. Fifty-two million adult Americans – 55% of the Internet-user population – have turned to Internet sources to seek health information. In this report, we call them "health seekers" because most are in pursuit of information that will help them at a time when they or their loved ones are sick. Patients and their families are using the Internet to help with many aspects of care, but they are most likely to have sought material to find out about the options they have for battling illnesses and the prognoses for those illnesses. In addition, they investigate how to participate in clinical trials for new drugs; they examine reports on the course of diseases; they buy vitamins, download fat-free recipes, use caloric calculators, and search for ways to develop "washboard abs." Further, they check report cards for hospitals, doctors, and health insurers. Some support each other through disease-specific bulletin boards and trade ideas about how to deal with symptoms with support groups.

This is all taking place in an environment where the burden of responsibility in the health-care system has shifted more to patients. Health maintenance organizations and tighter insurance rules have compelled patients to take more assertive roles in their own care. A typical doctor's visit has reportedly shrunk to less than 15 minutes, and many patients leave a physician's office without getting answers to all the questions they have. One 1999 survey by Yankelovich Monitor found that half or more of Americans are not satisfied with the availability of their doctors and not satisfied with the duration of their meetings with their doctors. Not surprisingly, many Internet users have turned to the Web to provide the information they find hard to get from their care-givers and because they are increasingly interested in participating in what the medical community calls "shared decision-making."

Health Seekers

Internet users who have gone online for health or medical information

All Internet users	55%
Online women	63%
Online men	46%
Veteran users (3 or more yrs)	59%
New users (less than 6 mos.)	47%
Online parents	59%
Online non-parents	52%

Source: Pew Internet & American Life Project surv July-August 2000

In a comparative sense, more Internet users have sought medical information on the Web than have shopped online (47% of Internet users have done that), looked up stock quotes

(44% of Internet users have done that), or checked sports scores (36% of Internet users have done that). Twenty-nine percent of health seekers, or about 15 million people, go online to look for medical information about once a week and 30% go online once per month. Less-healthy people are more likely to seek such information frequently – 32% of those who say they are in less than excellent health go online once per week, compared to 23% of those who say they are in "excellent" health. On a typical day online, about 6% of Internet users are seeking health and medical information. That is more than 5 ½ million Americans.

The health-seeker population is made up of many more women than men. Fully 63% of women with Internet access have sought health information, while 46% of online men have done that. On a typical day, this gender difference is reflected in the fact that 59% of those seeking such information are women.

Health seekers are proportionally more middle-aged than very young or old, with the highest proportions of usage showing up in those between the ages of 30 and 64. Two thirds of women between the ages of 30 and 49 who have Internet access have gone online to get health or medical information. The other demographic trait that distinguishes health seekers is their level of experience with the Internet. The longer someone has had access to the Internet, the more likely it is that she has gotten medical information. Some 59% of those with three years of Internet experience have sought medical information, compared to 47% of those who first went online within the past six months. It is worth noting, though, that this gap between veterans and newcomers is substantially smaller when it comes to health information than it is on many other popular Internet activities.

In our survey, 91% of health seekers reported they were covered by health insurance – the rest said they weren't covered. That means health seekers are more likely to have insurance than members of the general U.S. population. Some 15.5% of all Americans – adults and children – are uninsured.

The rest of the demographic story about health seekers is notable for what *does not occur:* In contrast to many other online activities, the seeking of health information is equally compelling to all racial and ethnic groups. Similarly, there is no major "income" effect on this activity. The likelihood that someone has gotten health information does not correlate with her household income. Compared to, say, online auctions or online banking, the search for health information is a relatively popular activity with newcomers to the Internet and they are more likely to be members of minority groups and those from households with incomes under $50,000.

The most significant finding in this survey is that the health decisions made by many health seekers are influenced by the health and medical information they find on the Web. More than four in ten health seekers (41%) say that the material they found during their last online search affected their decisions about whether they should go to the doctor, how to treat an illness, or how to question their physician. Half of all Internet users who have gone online for medical information (48%) say the advice they found on the Web has improved the way they take care of themselves and 55% report that it improves the way they get health care information.

In many cases, the timing of the online search for health information, the nature of the search, and the impact of the search depended on who is doing the search. Women and men perform different kinds of health searches online. Those who are in excellent health do different kinds of searches from those who are in less-than-excellent health. And those who are searching for information on behalf of themselves have a different purpose from those who are seeking information on behalf of others, like children, parents, or other relatives. One Internet user sent a testimonial to our site about how online health research has improved his own health care and that of his wife, his children, and his great-aunt – keeping him more up-to-date than their doctor on some medical procedures.

The results in Section One of this report are based largely on two surveys: One uses data from roughly six months of telephone interviewing conducted between March and August 2000, among a sample of 12,751 adults, 18 and older – 6,413 of whom are Internet users. The other was a survey during the summer probing all Internet users' feelings about health privacy. It involved 2,109 persons, 1,101 of whom are Internet users. In addition to this daily tracking poll, we conducted a special survey of 521 Internet users who go online for health care information, the results of which are detailed in Section Two. This special sample, which was conducted August 3-14, portrays the habits and attitudes of the 52 million Americans who use the Internet for medical information and advice.

SECTION ONE: ALL INTERNET USERS

The reasons people like to go online for health information

Internet users say that one of the most important aspects of online health advice is the fact that it's available at any hour of the day or night, from wherever they are able to log on. Fully 93% of those who have gotten health information say that convenience is important. Internet users also like to search a diverse menu of resources – from commercial sites like Drkoop.com to government sites like the federal National Institutes of Health (www.nih.gov). Eighty-three percent of those who have sought health information say it is important that Internet users can get more health information online than from other sources.

Convenience, anonymity, and wealth of information

Percent of health seekers who say this factor is "very important" to them when it comes to seeking health information online

You can get information at any time	66%
You can get information anonymously	46%
You can get more information online than from other sources	37%

Source: Pew Internet & American Life Project survey, July-August 2000

Anonymity is also important to Internet users – the search for health information can be conducted without encountering anyone else. Nobody has to know about that bout with depression or an incontinence problem. Eighty percent of health seekers say it's important that Internet users can get health information anonymously.

All these attributes of the Web are especially attractive to women, to parents who have children under 18 at home, and to minorities. And it is easy to speculate why. In addition to being concerned about their own health, many women are also gatekeepers and advocates for the health of those they love. Women, in general, and mothers, in particular, are also

among the most stressed for time, so the convenience of looking up health information on the Web is appealing to them. For African-Americans and Hispanics, the Web's appeal might lie in the fact that it is especially empowering to them when they can get information to supplement information from sources such as doctors, clinics, or hospitals.

Privacy concerns about using the Web for health information

Hospitals, pharmacists, insurance companies, and patients are struggling with the murky issues of medical privacy. Internet users have made it clear that privacy is one of their primary concerns – whether it's their name and address being sold to a marketer or their medical records being handed over to researchers or broken into by crackers (that is, hackers with destructive or illegal intent). Everyone involved with online health care is waiting for new privacy rules that are expected to be released in the next few weeks by the Clinton administration's Department of Health and Human Services (HHS).

There is little legal protection now for health information – online or offline. Unlike financial records, credit reports, and even video rental records, there is no comprehensive federal law that protects the privacy of medical records. State laws are generally considered inadequate for the rapidly changing health care delivery system. That is why Congress specified in the 1996 Health Insurance Portability and Accountability Act that federal rules should be written by HHS in 1999 if Congress itself had not written such rules. The department released draft regulations in November 1999, and received more than 55,000 comments on the draft.

It appears unlikely that the new rules will have a major impact on health Web sites or give significant privacy protections to those who use those Web sites. The regulations may impose some confidentiality standards on certain Web sites and provide new protections for the consumers who frequent such sites. But the regulation will only cover three kinds of health care entities, all of which are related to insurance activities. They will cover providers who electronically transmit insurance claims information, insurers, and the "clearinghouses" that process information for providers and insurers. The draft regulation only covers a select universe of information held by these three entities.

Health privacy

Percent of all Internet users who say they are "very concerned" a Web site might sell or give away information about what they did online

All Internet users	69%
Online women	73%
Online men	65%
Online blacks	75%
Online Hispanics	69%
Online whites	68%
Online parents	74%
Online non-parents	65%
New users (<6 mos.)	77%
Veteran users (3+ yrs)	67%

Source: Pew Internet & American Life Project survey, July-August 2000

Given the wide range of activities that take place on the more than 17,000 health-related Web sites, and the relatively narrow scope of the regulation, it is likely that a great deal of health information collected on health Web sites will *not* be covered by the new regulation. Many of those Web sites do not fall into any of the categories of organizations covered by the new rules.

Still, the Web sites that will be covered by the new regulation may have to change their practices in significant ways. Among its many provisions, the draft regulation: gives consumers a right to inspect and copy their own health information; requires that consumers

receive notice about the use and disclosure of their health information; and gives consumers the right to limit disclosures in many circumstances. (A full explanation of the current state of those regulations and what will not be covered can be found in an article written by Janlori Goldman and Zoe Hudson of the Health Privacy Project entitled "Virtually Exposed: Privacy and E-Health" at www.healthaffairs.org in the December, 2000 issue.)

Internet users will appreciate whatever privacy protections they get, and they appear eager to get as many safeguards as possible. Most Internet users are anxious about their privacy online and this general feeling becomes quite acute when it comes to medical and health information. An overwhelming majority of Internet users and an even greater 89% of health seekers are concerned that a health Web site might sell or give away information about what they did online.

Most health seekers fear reprisals might occur if others knew the kind of information they were examining at health Web sites. Eighty-five percent of health seekers are concerned that an insurance company might raise their rates or deny coverage because of the health sites they have gone to online. In a similar vein, Internet users are afraid that their online health research could have an impact on their job status. More than half of health seekers (52%) are concerned that their employer might find out what health sites they have gone to online. Interestingly, this question elicited the highest level of "not at all concerned" responses in the overall Internet population – 35% – possibly because not all respondents are employed, possibly because these Internet users do not believe their employers will track their online health research. This relatively high level of confidence may also be explained by the fact that most Internet users go online from home when they get for health care information.

African-Americans, Internet newcomers (those who have been online for 6 months or less), and parents with children under 18 showed the highest levels of privacy concerns.

Medical records

One of the hottest topics among doctors, legislators, and health Web site business leaders is the act of putting medical records online. The American Medical Association not only endorses online technology, but also has helped found Medem, a for-profit technology company that creates Web sites for doctors and would allow for secure communications between patients and offices. Many argue that the ready availability of a patient's comprehensive medical history would save lives, reduce life-threatening medical errors, and improve the communication between doctors and patients, and doctors and their colleagues. Mark Leavitt, chairman of MedicaLogic/Medscape, Inc., testified before Congress in June 2000 and compared the convenience of online medical records to ATM machines and called on legislators to aid in the fight against the "national problem" of medical errors.

But is the public ready for this step? A majority of Internet users (60%) think that putting medical records online is a bad thing, even if they are on a secure, password-protected site, because they would worry about other people seeing their personal information; 33% think it's a good thing because they would have easy access to their own medical records. Some 63% of health seekers believe that putting medical records online is more a threat to privacy that it is a benefit. Women, older Internet users, and Internet novices are the most wary of online access to medical records. Sixty-five percent of online women say they would worry

about other people seeing their health records, compared to 55% of online men. Sixty-five percent of Internet users between 30-49 years old are opposed to online medical records, compared to 50% of those between 18-29 years old. Fully 74% of Internet users with less than six months of online experience are fearful of online records, compared to 58% of Internet users with three or more years of online experience.

Men, young people, and more experienced Internet users are the most likely to say online medical records are a "good thing." Thirty-seven percent of online men see the benefits, compared to 30% of online women. Forty-three percent of Internet users between 18-29 years old say online access would be good, compared to 32% of those between 50-64 years old. Thirty-six percent of those who have been online for three or more years see the advantages of online medical records, compared to 19% of the newest users (less than six months experience).

SECTION TWO: HEALTH SEEKERS

*What health seekers want and how they hunt for it**

Health seekers are mostly interested in investigating specific physical and mental ailments and their searches often are tied to visits to the doctor. However, they do not use the medical establishment or even friends to help guide their online searches when it comes to health care. Most health seekers treat the Internet as a vast, searchable library, relying largely on their own wits, and the algorithms of search engines, to get them to the information they need. Asked about the most recent time they got health-related information online, more than 30% checked out four or more Web sites. Younger health seekers and those with relatively high educations (at least some college-level work) are the most likely to have looked at multiple sites.

Ninety-one percent of health seekers have looked for information about a physical illness or condition and 26% have looked for information about a mental health issue like depression or anxiety. Less-healthy people are more likely to go online frequently for medically-related material and to have sought mental health information on the Web – 30% of those who say their health is less than excellent have sought material about mental illness, compared to 19% of those who say their health is excellent.

In contrast to their aggressive use of the Internet to do research about specific illnesses, health seekers are much less likely to have interacted with a doctor online, to have searched for general news about health and medicine, or to have bought a medical product or vitamins online. While online pharmacies promote the convenience of ordering online – and some skirt federal laws by dispensing sensitive items such as Viagra without a prescription – most

The medical information they have sought	
The percent of health seekers who say they have:	
Sought information about a physical illness	91%
Sought information about mental illness	26%
Gotten information about a sensitive topic that is difficult to talk about	16%
Gotten advice from an online doctor	10%
Bought medicine or vitamins online	10%
Used email to communicate with a doctor	9%
Participated in an online support group	9%

Source: Pew Internet & American Life Project health seekers survey, August, 2000.

This section is based largely on a special survey of 321 Internet users who go online for health care information

health seekers are not yet using the Web as a substitute for the corner drug store. Only 10% of health seekers have purchased medicine or vitamins online.

Once they have found a useful site, health seekers are likely to go back to it again. Forty-two percent of health seekers have kept a health Web site bookmarked or saved as a "favorite place," so they can go back to it regularly. Men are more likely to have bookmarked a site than women. And health seekers with more online experience are more likely to bookmark health sites – 45% of those with two or more years of experience have done this, compared to 36% of those with one year or less online experience.

The quality of information: Verify before trusting

Much of the health information available on the Web is not monitored for accuracy or quality. The Federal Trade Commission estimates that doctors review only about half of the content on health and medical Web sites. There is significant concern – especially on the part of advocates for the chronically ill – that patients may harm themselves based on inaccurate information or products obtained on the Internet. In October, for example, a Web-distributor of a home HIV test kit was brought up on charges of misleading his customers because the Federal Drug Administration did not, in fact, approve the faulty kit he sent to over 600 people in the U.S. The few studies by scholars and medical professionals have raised concerns about the reliability of online information. For instance, a 1999 survey by a team at the University of Michigan of 400 health sites found that half of them had not been scientifically reviewed and that 6% provided incorrect information. A study in 1997 that focused on the recommendations of 41 Web sites on how to deal with children's fevers found that only four of the sites offered recommendations that were completely consistent with established guidelines in the medical community. Because of such fears, the American Medical Association and other medical groups have mounted major campaign to stress that consumers need to check the quality of information they get online.

Our survey confirms that the vast majority of Internet users are worried about getting bad information online. Fully 82% of those with Internet access – health seekers and nonseekers alike – say they are concerned about getting health information from an unreliable source online. Thus, it is not surprising that 58% of health seekers have looked to see what company or organization is providing the advice or information that appears on a health Web site. Health seekers with more education are more likely to check the source of health information – 61% of those with at least some college education have done so, compared to 46% of those with a high school education or less.

While there is a high anxiety among Internet users about health information online, 52% of users who have actually used health sites think that "almost all" or "most" health information they see on the Internet is credible. Forty-four percent of health seekers think that they can believe only "some" online health information. Just 1% of health seekers say "almost none" of the information is credible. Younger health seekers (under age 40) and those with less formal education are more likely to support the credibility of the health information on the Internet.

The absolute value of anonymity

Health seekers report a broad lack of interest in activities that might require them to identify themselves online. They want to be in control of the search for health information and they do not relish giving up personal information in the process. These Internet users would much rather stay anonymous than participate in an exchange about health information online where personal information was given up in return for access to a site or for customized content. In fact, the anonymity of Web searches for health information is sometimes seen by users as preferable to contact with human beings. Some 16% of health seekers have gone online to get information about a sensitive health topic that is difficult to talk about. Health seekers under the age of 40 are also more likely to have done this – 23%, compared to 10% of those over 40.

The vast majority of health seekers are concerned that a health site might disclose what they did online, most worry about their insurance companies or employers finding out what Web sites they have accessed, and most object to the idea of having their medical records posted even on a secure server.

Only 9% of health seekers have participated in an online support group for people who are concerned about the same health or medical issues. This contrasts sharply with another Pew Internet Project survey that found 36% of Internet users who had gone to a support-group site or one that provides information about a specific medical condition or personal situation. Again, it appears that health seekers are much more protective of their privacy than the general Internet population.

Don't follow me around

Despite the fact that 89% of health seekers say they are concerned that a health Web site might sell or give away information about what they did online, just 24% of health seekers have clicked on a health or medical Web site's privacy policy to read about how the site uses personal information. Health seekers who have expressed privacy concerns are more likely to have clicked on the privacy policy – 31%, compared to 21% of those who say they are not too concerned about privacy.

Don't track, don't tell

Health seekers value anonymity because only …	
21%	have provided their email address to a health Web site
17%	have provided their name or other personal information
and fully …	
75%	believe Internet firms should not be allowed to track users'

Source: Pew Internet & American Life Project health seekers survey, August, 2000

Most commercial health Web sites rely on advertising for a large portion of their revenue. Third party ad networks – such as Doubleclick – are interested in tracking and profiling Internet users so that customized ads and content could be placed on their screens. While many of the firms that run health sites say they do not profile based on the health-related material a user has accessed on their site, there is a great deal of concern among privacy advocates that advertisers can have access to sensitive health information without the consumers' knowledge or consent.

There has not been an extensive review of the privacy policies of the entire universe of health-related Web sites. One important analysis of the 21 most heavily used health sites by the Health Privacy Project in early 2000 showed that several sites warn users that advertisers might have access to information, and that the sites have no "control" over this practice. But most of the policies were silent on the issue of profiling. Unless an Internet user is a very savvy Web surfer, she will never know if she is being tracked and profiled by a health Web site or those that advertise on the site.

Advocates of profiling argue that it brings several advantages to Internet users. They say that it helps Internet companies provide customized information and tailored ads that closely match a user's interests. That helps the user get the information she needs and makes her aware of the products that matter most to her. This eliminates waste and makes it easy and quick for users to get the information they are seeking. Moreover, many point out that the growth of the Internet would not be taking place were it not for the fact that advertising supports the availability of much of the information online.

Yet, most health seekers still have a dim view of profiling. Three out of four health seekers (75%) think Internet companies that specialize in health or medical information should not be allowed to track the activities of people who visit their Web sites and just 18% of health seekers think Internet companies should be allowed to track activities. These findings show a higher level of concern about tracking among Internet users who visit health sites than among the general Internet population. In our previous study on trust and privacy online, 62% of all Internet users said Internet companies should not be allowed to track; 22% of all Internet users said companies should be allowed.

Heightened privacy concern

Health-seekers are more likely to be opposed to tracking

	Health-seekers, when asked about health sites	Internet users, when asked about Web sites in general
Companies should NOT be allowed to track activities	75%	62%
Companies should be allowed to track activities	18%	22%

Source: Pew Internet & American Life Project, May-June and August 2000

Health seekers are not very likely to have traded personal information with health-related Web sites – just 21% of health seekers have provided their email address at a health Web site. Seventeen percent of health seekers have provided their name or other personal information at a health Web site. This is a sharply lower rate of disclosure than takes place in the overall Internet population. In our previous report "Trust and Privacy Online," we noted that 54% of all Internet users had given up their email address and other personal information in return for access to Web sites.

Yet while health seekers are determined to preserve their privacy, few have resorted to guerrilla tactics to get access to Web sites. Just 4% of health seekers have provided a fake name, email address, or other personal information in order to avoid providing real information at a health Web site. In our trust and privacy study, we found that 24% of Internet users have provided a fake name or personal information in order to gain access to a Web site.

An overwhelming majority of health seekers (87%) think there should be rules about how health and medical companies on the Internet can track activities. Just 10% don't think rules are needed. Health seekers register slightly more caution about health Web sites' business practices than the general Internet population's attitude toward tracking. In our previous study on trust and privacy online, 81% of Internet users said there should be rules about Internet companies' ability to track. Asked who should set the rules about if and how health companies can track online, 47% of health seekers said Internet users themselves should set rules, 25% said the federal government should set the rules, and 18% said Internet companies should set the rules.

And, in a finding that runs counter to existing federal policy, 81% of health seekers think people should be able to sue a health or medical company if it gave away or sold information about its Web site users after saying that it would not. Under current law, the Federal Trade Commission can take action, but individuals have no federal right to sue.

Case study: The last time each health seeker went online

To move beyond abstractions and get a picture of Internet users' actual behavior, we asked health seekers to relate details about their most recent foray online for health information. For about one-quarter of respondents, it was a fresh memory. Some 23% of health seekers said the last time they went online to look for medical advice or information was within the last week; 35% said it was in the last month; 31% said it was in the six last months, and 10% said it was sometime more distant in the past than that.

The youngest patients
Who is seeking health information for children

All health-seekers	13%
Women	16%
Men	7%
Under 40 years old	17%
Over 40 years old	9%

Source: Pew Internet & American Life Project health seekers survey, August, 2000

The overwhelming majority of health seekers (83%) said they went online from home the last time they sought medical advice or information on the Internet. Only 14% went online from work.

There are two major reasons health seekers go online for medical information – they are gathering information for themselves or they are gathering it for someone else. Our findings suggest that there are more health seekers looking for information on behalf of someone else than there are health seekers looking for themselves. When asked about their most recent search, 43% of health seekers were hunting for material for themselves and 54% were searching for information for someone else. That 54% breaks down this way: 13% of health seekers were looking for health information on behalf of a child, 8% were looking on behalf of a parent, 15% were looking on behalf of another relative, and an additional 18% were looking for health information on behalf of someone else.

Women were more likely to seek health information on behalf of a child – 16% of women were doing this the last time then went online looking for medical material, compared to 7% of men. However, men were just as likely as women to have been seeking health information on behalf of a parent, another relative, or someone else.

The health seekers in our survey were more likely to be focused on an immediate problem, rather than general information or updates on medical news; 70% went online for

information about a specific illness or condition. Thirteen percent sought information about fitness and nutrition, 11% sought basic news about health care, and 9% sought information about specific doctors, hospitals, or medicines.

Of those who were looking for online guidance about a specific illness or condition, 48% looked up symptoms of that illness, 30% sought information about medicines or treatments, and 29% were trying to find out what happens to people who contract a specific illness.

Because most are so focused on a specific illness, it is not surprising that health seekers seem to use Internet health sites to supplement a doctor's advice or to understand a diagnosis better. Fifty-nine percent of those who sought information on behalf of another person did so after that person had visited a doctor or clinic and 34% of those who sought the information for themselves went online after a doctor's appointment. Those who went online to seek health information for themselves were just as likely to be looking for this advice independent of a doctor's visit (35%). A very small percentage of health seekers used the Web to get medical advice instead of visiting a doctor or clinic – just 2% of those who sought information for themselves and 3% of those who sought information on behalf of someone else.

For "yourself" or for another person

When seeking health information for someone else, most wait until after seeing a doctor

Percentage of Health Seekers who went online seeking advice...	For yourself	For someone else
before visiting a doctor or clinic	27%	14%
after a visit	34%	59%
instead of a visit	2%	3%
unrelated to a visit	35%	22%

Source: Pew Internet & American Life health seekers survey, August 2000

The Internet users looking for health advice for their own problems were more likely to have checked the Web before a doctor's appointment – 27%, compared to 14% of those who sought health information for others. Health seekers under the age of 40 were more likely to seek information in preparation for their own doctor's appointment – 34%, compared to 21% of those over 40. Older health seekers were more likely to go online after they had visited a doctor or clinic (41%, compared to 26%).

Health seekers' search for information had a scattershot quality. Three-quarters of those seeking health information were not content to get material from just one Web site. Only 17% in our sample did that. In contrast, half of health seekers (49%) visited two or three Web sites the last time they looked for health information online; 18% of health seekers went to four or five sites and 9% visited six to ten sites; 4% went to 11 or more sites.

Most health seekers were on their own in finding the sites they visited. An overwhelming majority of respondents (81%) said they found the health Web sites through an Internet search and 62% had not heard about the sites they ended up visiting before they began their search. Just 10% of health seekers had heard about the sites through an advertisement they spotted and 6% had gotten a recommendation from a friend or relative. A very few health seekers read about the site in a news article or followed up on a recommendation from a doctor, health insurance company, or HMO.

Once they completed their Web crawling, health seekers liked what they found. Fully 92% of health seekers say the information they found was useful and 81% said they learned something new the last time they went online for health information.

About half of health seekers (47%) who looked for information about their own health situation said the information they found online affected decisions about health treatments or the way they take care of themselves. Of those who said the information had an effect on the way they coped with the ailment, 51% reported that they changed the way they eat or exercise based on what they read online.

Those who sought information on behalf of another person were somewhat less likely to say that information found online affected decisions about the person's health care. Still, more than a third (36%) of those hoping to help a loved one or friend said the Web resources affected the decisions they made about how to help the patient.

Of those swayed by what they read online, whether it was information for themselves or for someone else, 70% said the information affected their decision about how to treat an illness or condition. Fifty percent said the information lead them to ask a doctor new questions or to get a second opinion from another doctor. And 28% said the information affected their decision about whether to see a doctor.

The healthy really are different

The percentage of health seekers who…	Those who claim less-than-excellent health	Those who claim excellent health
sought health information for themselves last time	52%	29%
sought health information for someone else last time	44%	68%
go online for health information about once a week	32%	23%
have ever sought mental health information online	30%	19%

Source: Pew Internet & American Life Project health seekers survey, August 2000

The healthy try to help others; the less-healthy try to help themselves

The health status of those getting medical information online strongly correlates with the reasons a health seeker turns to the Web and on the results of her search. A majority of health seekers describe their health as less than ideal – 49% say it is "good," 10% say it is "only fair," and 2% say their health is "poor." Thirty-nine percent of health seekers describe their own health status as "excellent."

The last time they went online for health information, users in less-than-excellent health were more likely to have sought information for themselves than for other people. Fully half (50%) of those in less-than-excellent health say the information they gathered online during their most recent search affected their decisions about health treatments. That compares to 39% of those in excellent health who reported such an impact. Moreover, those in less-than-excellent health were more likely to report their hunt on the Web led them to ask new questions of their doctor or get a second opinion. Fully 52% of them reported such an effect, while 44% of those in excellent health said the online material led them to ask new questions or get a second opinion.

Those in excellent health were more likely to seek advice on behalf of someone else – a child, parent, relative, or another person.

How women and men differ in their online behavior

Women are more likely than men to have sought health information online. In general, women more frequently say they have searched for information about illnesses and about illness symptoms. Men are more likely than women to have sought information on behalf of themselves. Men are more likely than women to say their Web search affected their decisions about how to treat a disease. While women are more likely to seek material about the illness that is causing disease symptoms, men are more likely to hunt for information about the prognosis of a disease and what happens to people when they undergo certain treatments or take certain medications.

More often than men, women carry out health searches after a doctor's visit. Women are also more likely to access online health information on behalf of their children. There are no notable gender differences when health seekers are looking for information on behalf of parents, other relatives, or other people. However, men are more likely than women to have used the Web information they gathered to ask follow-up questions of a medical professional.

A tale of two genders

Women and men differ in their health-seeking Web searches

The percent of each gender who have sought information about…	Women	Men
a physical illness	93%	86%
a mental illness	28%	23%
a sensitive health topic that is difficult to talk about	14%	20%
During their most recent online health search looked for information …		
on behalf of themselves	41%	46%
on behalf of a child	16%	7%
on behalf of a parent	9%	7%
on behalf of another relative	15%	17%
on behalf of someone else	16%	20%
Performed the search for themselves and did it…		
after visiting a doctor	39%	26%
unrelated to a visit to the doctor	31%	42%
Performed the search for someone else and did it …		
after visiting a doctor	63%	53%
When looking for material about a specific illness, sought information about…		
health conditions that may be related to specific symptoms	51%	42%
what happens to people who get a specific illness or treatment	25%	36%

Source: Pew Internet & American Life Project health seekers survey, August, 2000

Perhaps because they are the most active health seekers, women are more likely to register strong feelings about the benefits of online searches, especially those related to the wealth of information online and the convenience of online searches. And women are more likely than men to worry about getting unreliable information from the Web. Men's and women's attitudes about privacy are very similar. However, compared to women, men are slightly more privacy-conscious; they are more likely to have read a Web site's policy. And men are somewhat more eager to take advantage of the fact that they feel anonymous online; they are more likely to have used the Web to search for information about sensitive health issues. Finally, men are more likely to have bookmarked a health site for future reference (48% to women's 39%).

Fervent and engaged health seekers

Frequent users of health Web sites were more likely to be engaged in online activities that augment their health care. About 59% of health seekers report going online for health information at least once a month. There is not a notable gender difference in this, but age plays a role: 63% of health seekers under age 40 are frequently online for health information, compared to 54% who are over that age. Two-thirds of these frequent health seekers live in households earning less than $50,000. And frequent health seekers are less well physically than health seekers who use the Web less often. Some 62% of frequent health seekers report being in less-than-excellent health, while 53% of those in excellent health report frequent health searches online.

Internet users who said they go online for health information at least once a month are more likely to participate in an online support group, buy medicine or vitamins online, email their doctor, check a site's privacy policy, describe a medical condition online to get advice, bookmark a favorite health site, verify the source of a site's health information, and look for information about a physical or mental health issue. These highly engaged health seekers are also more likely to say the Internet has improved the way they take care of their health, compared to those who seek online health advice every few months or less often.

METHODOLOGY

This report is based on the findings of a daily tracking survey on Americans' use of the Internet. The results in Section One are based largely on data from roughly six months of telephone interviewing conducted by Princeton Survey Research Associates between March 1, 2000 and August 20, 2000, among a sample of 12,751 adults, 18 and older. Some 6,413 of them are Internet users. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2.5 percentage points. A special survey of 2,109 adults (1,101 are Internet users) was conducted between July 24 and August 20, 2000 and dealt primarily with health privacy issues. Results in Section Two of this report are based largely on data from a special survey of 521 Internet users who go online for health care information. For results based on this second survey, the margin of error is plus or minus 5 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

The sample for this survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

A new sample was released daily and was kept in the field for at least five days. This insures that the complete call procedures are followed for the entire sample. Additionally, the sample was released in replicates to insure that the telephone numbers called are distributed appropriately across regions of the country. At least 10 attempts were made to complete an interview at every household in the sample. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Interview refusals were re-contacted at least once in order to try again to complete an interview. All interviews completed on any given day were considered to be the final sample for that day.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's Current Population Survey (March 1999). This analysis produced population parameters for the demographic characteristics of adults age 18 or older, living in households that contain a telephone. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

Throughout this report, the survey results are used to estimate the approximate number of Americans, in millions, who engage in Internet activities. These figures are derived from the Census Bureau's estimates of the number of adults living in telephone households in the

continental United States. As with all survey results, these figures are estimates. Any given figure could be somewhat larger or smaller, given the margin of sampling error associated with the survey results used in deriving these figures.