This high school resource package for the public television series "Healing and the Mind with Bill Moyers" includes: (1) a teacher's guide that provides complete lesson plans for each program in the series; (2) a glossary that features definitions of the terms used in the series; (3) a bibliography containing books of interest to both teachers and students; (4) a resources section that provides a list of journals, teacher training workshops, and organizations that can offer more information on the topics presented in the series; and (5) student cards that can be duplicated and distributed to students and are designed to give additional information on a variety of subjects related to the programs. The first episode, "The Mystery of Chi," explores traditional Chinese medicine and its fusion with Western practices in modern China. The science of mind-body medicine is the subject of "The Mind Body Connection," which examines current scientific research in the field. The ways in which people are using Eastern meditation and group psychotherapy to improve the healing capacities within their bodies are explored in "Healing From Within." "The Art of Healing" examines how hospitals are instituting new models of medical care that can help patients become active participants in their own healing. The final program in the series, "Wounded Healers," visits Commonweal, a health education facility in northern California where people with cancer help each other to heal even though a cure may be impossible. (WRM)
HEALING and the MIND

with Bill Moyers

RESOURCE MATERIALS

Includes:
- Teacher's Resource Guide
- Student Activity Cards
- Poster

Funding for the education materials has been provided by
The Fetzer Institute.

Education materials developed by Thirteen/WNET.

HEALING AND THE MIND WITH BILL MOYERS is a co-production of
David Grubin Productions, Inc. and Public Affairs Television, Inc.
January 1993

Dear Educator:

My interest in the relation of mind and body started a long time ago, growing up as I did in a culture that separated them so distinctly. In science class, we studied the material world, which we expected would someday be understood and predicted down to the last molecule. In philosophy, we studied models of reality, based on the rational mind, that took no notice of conditions male and female, sick and well, rich and poor. Yet every day in this divided world of mind and body, our language betrayed the limitations of our categories. My parents talked about our friend the grocer, who “worried himself sick,” and my Uncle Carl believed that laughter could ease what ailed you. Over the years, my interest in questions of mind, body, and health grew, both personally and professionally, and eventually led to HEALING AND THE MIND.

I believe this series has particular relevance to young people. For them to understand the connection between emotions and health is important under any circumstances, but such understanding is imperative today, given the life and death implications of so many decisions confronting teenagers, from the use of drugs to issues of sex. In the words of Vaclav Havel, “Every education is a kind of inward journey.” The education young people receive today surely must lead them into a deeper understanding of the inner sources of health.

During the production of HEALING AND THE MIND, my colleagues and I made our own journey, one that sought to answer many of the questions that provoked our curiosity about the emerging field of mind-body medicine. We encountered new questions, too — for which there are not yet answers. If the series advocates anything, it is that the journey is worth making for what each of us might learn about this remarkable union of mind, body and spirit that is the human being. I invite you and your students to join us.

Sincerely,

Bill Moyers

The HEALING AND THE MIND WITH BILL MOYERS Series

Executive Producer
David Grubin

Executive Editors
Bill Moyers
Judith Davidson Moyers

Producers
Chana Gazit
David Grubin
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Series funding provided by The Fetzer Institute, Mutual of America Life Insurance Company, Laurence S. Rockefeller, The John D. and Catherine T. MacArthur Foundation, and by The Nathan Cummings Foundation.
The complete set of HEALING AND THE MIND WITH BILL MOYERS, a five-part series, can be purchased for educational or library use for $395 (plus shipping and handling). Individual programs are available at $99.95 (plus shipping and handling). Shipping and handling costs are $5 for the first tape and $1 for each additional tape. Contact:

Ambrose Video
1290 Avenue of the Americas, Suite 2245
New York, NY 10104

Or call toll free: 1-800-526-4663

HEALING and the MIND

with Bill Moyers

TEACHER'S RESOURCE GUIDE

Funding for the education materials has been provided by The Fetzer Institute.
PROGRAM 1
THE MYSTERY OF CHI
STUDENT CARD: "HEALING AROUND THE WORLD"

Health Education
- Chinese medicine
- allopathic medicine
- traditional healing arts
- Tai Chi Chuan
- acupuncture
- massage
- Chi Gong
- homeopathic medicine

Science
- Use of acupuncture in brain surgery

Social Studies
- Peoples and Cultures
  - China
  - Africa
  - Egypt
  - India
  - South America
  - United States
  - (Native American)
  - Western Europe

PROGRAM 2
THE MIND BODY CONNECTION
STUDENT CARD: "THE IMMUNE SYSTEM"

Health Education
- Reversal of heart disease
- importance of diet, exercise, stress reduction and group support
- biofeedback

Science
- Overview of mind-body research
- the immune system
- relationship of the immune system to the emotions
- links between the nervous system and the immune system
- conditioning immune response
- neuropeptides
- biofeedback
- heart disease

PROGRAM 3
HEALING FROM WITHIN
STUDENT CARD: "WELLNESS SELF-ASSESSMENT"

Health Education
- Self-assessment of behaviors related to health
- Buddhist meditation known as mindfulness
- relaxation
- effects of meditation and group psychotherapy on those who are ill
- importance of expressing feelings

Science
- group psychotherapy
- cancer

PROGRAM 4
THE ART OF HEALING
STUDENT CARD: "TAKING CHARGE OF YOUR HEALTH"

Health Education
- Taking an active part in your health
- how to cope when a loved one is ill
- massage
- nurturing
- therapeutic touch
- role playing

Science
- Neonatal clinic
- new models of medical care
- open heart surgery

Social Studies
- Satellite hospitals in urban areas
- overview of role of hospitals throughout history

PROGRAM 5
WOUNDED HEALERS
STUDENT CARD: "THE CIRCLE OF LIFE"

Health Education
- Relationship of family members to the seriously ill
- healing function of yoga, meditation, massage, relaxation, poetry, art, and prayer
- healing and curing

Science
- Cancer

Social Studies
- Peoples and Cultures
  - United States
  - Cameroon
  - Brazil (Candomblé)
  - Zaire
  - Mexico
  - China
  - Peru
  - Native American
  - rituals celebrating life transitions and milestones

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NOTE:
You have the right to tape the programs off the air and use them for instructional purposes through June 30, 1993.
The programs are closed captioned for the hearing impaired.

ABOUT THE FUNDER
The Fetzer Institute
9292 West KL Avenue
Kalamazoo, MI 49009
(616) 375-2000

The Fetzer Institute is a nonprofit educational organization that promotes research into health-care methods that utilize the principles of mind-body phenomena. The Institute believes that the study of the mind's influence on the body — and the relationship of the body, mind, and spirit — can provide the basis for developing scientifically sound approaches to health care that expand the scope of medical science and give individuals greater control over their own health.

The Institute works collaboratively with other research and educational organizations and institutions. Its research interests are aimed at exploring the relationship between the mind and the body and its impact on health. Its educational activities are directed toward the development of mind-body curricula for medical schools and health professionals and the dissemination of research findings into the educational process.
INTRODUCTION

In Boston, a construction worker learns a form of Buddhist meditation that he hopes will help alleviate his chronic pain. In China, a fully conscious woman undergoes brain surgery in which acupuncture is used to minimize the need for anesthesia. In California, a group of women with metastatic breast cancer attend a weekly psychotherapy support group in hopes of easing anxiety and depression and enhancing their lives. In Dallas, patients review their medical records in a program designed to help them become partners in their own healing. These are only some of the models today's Western medical practitioners are examining in an effort to understand the healing connection between the mind and the body.

For thousands of years the connections between mind and body have been central to the healing traditions of many cultures. Western medicine, with its extraordinary advances in research and technology, has only recently begun to reconsider this relationship. Scientific research, for example, is examining the connection between the immune system and the emotions; the effectiveness of traditional healing arts is being studied using scientific methods; and the effect of new clinical approaches, designed to help patients take an active role in healing, are being carefully documented.

In HEALING AND THE MIND WITH BILL MOYERS, a five-part series premiering on public television in February, 1993, Bill Moyers explores healing approaches that are outside the framework of Western allopathic medicine. “The Mystery of Chi” explores traditional Chinese medicine and its fusion with Western practices in modern China. The science of mind-body medicine is the subject of “The Mind Body Connection,” which examines current scientific research in the field. How people are using Eastern meditation and group psychotherapy to improve the healing capacities within their bodies is explored in “Healing From Within.” “The Art of Healing” examines how hospitals are instituting new models of medical care that can help patients become active participants in their own healing. The final program in the series, “Wounded Healers,” visits Commonwealth, a health education facility in northern California where people with cancer help each other to heal even when a cure may be impossible.

USING THE EDUCATIONAL MATERIALS

For today’s young person, health choices have life and death implications. Drug and alcohol abuse as well as the threat of AIDS have put greater pressure on educators to prepare students to face challenges and to make healthy choices. In this context, these educational materials, which highlight the mind’s role in health and healing, can play a valuable role in high school classes. The underlying objectives of the materials are to provide students with new ways to look at health and to give them information that can help them make good, informed choices that will contribute to their health and well-being.

HEALING AND THE MIND is appropriate for health and science curricula at the secondary level and can be integrated into social studies and guidance classes as well. The educational materials are designed to be used in conjunction with the programs, but can also function as permanent reference units that can be used without the program component.

Contents

This High School Resource Package contains the following:

- A Teacher’s Guide that provides complete lesson plans for each program in the series. Each lesson plan includes:
  - A Topic Index that lists the corresponding curriculum areas for each program.
  - Background/Overview that offers a brief history and overview of the program’s subject. This background information may be duplicated for students.
  - Program Summary that gives a brief synopsis of the program.
  - Goals that provide the teacher with outcomes for each lesson.
  - Introducing the Program that recommends an approach for introducing students to the basic theme of the program without requiring any prior knowledge or preparation.
  - Discussion Questions that help students assess the main points of the program and extend them to their own experience.
  - Introduction to the Student Card that introduces students to the activity on the student card accompanying the lesson.
  - Activities that help students explore and extend the themes presented in the program.
  - Suggested Reading that features books that not only correspond to the program’s theme but also may be of special interest to students.

- A Glossary that provides definitions of terms that are used in the series appears on page 12.

- A Bibliography with books of interest to both teachers and students appears on page 13.

- A Resources Section provides a list of journals, teacher training workshops, and organizations that can offer more information on the topics presented in the series.

- A Topic Index that lists the corresponding curriculum areas for each program.

- A Poster is also provided for classroom display.

PROGRAM SCHEDULING

The programs are scheduled to be broadcast initially on the following dates. Please check local listings for any scheduling changes. Contact your local station for rebroadcast schedules.

- The Mystery of Chi
  Monday, February 22 • 9:00 p.m.

- The Mind Body Connection
  Monday, February 22 • 10:00 p.m.

- Healing From Within
  Tuesday, February 23 • 9:00 p.m.

- The Art of Healing
  Wednesday, February 24 • 9:00 p.m.

- Wounded Healers
  Wednesday, February 24 • 10:00 p.m.

All programs are 60 minutes long except for “Healing From Within,” which is 90 minutes in length.
Chinese Medicine. The term sounds foreign, even exotic to many Western minds, because we've learned to think of medicine as synonymous with European and American science. For more than a decade, however, Western physicians have been examining the centuries-old Chinese system and the unique insights and methods of treatment that it offers. In general, Chinese practitioners consider all aspects of a patient's life, including mental state, personality, and social and physical environment, and their bearing on the person's health. They consider symptoms part of the pattern of a person's life. In contrast, Western practitioners tend to focus on specific diseases and their causes.

The Chinese system of medicine is based on several important ideas.

- **Yin and Yang.** In Chinese philosophy, these are the dynamic, opposing but complementary forces that are present in all parts of the universe — animate as well as inanimate objects, visible as well as invisible phenomena. For example, time has yin and yang aspects — night and day; temperature has — heat and cold; weight has — light and heavy. All foods have yin and yang aspects, as do all organs of the body.

- **Chi or Qi (pronounced CHEE).** In very simple terms, Chi is said to be the human body's vital energy. From the perspective of Chinese philosophy and medicine, it is akin to “matter on the verge of becoming energy or energy at the point of materializing” into matter. Optimally, according to the Chinese model, Chi circulates freely throughout the body. When the body's yin and yang properties are in balance, Chi flows smoothly and the person is healthy. When yin and yang are out of balance, Chi is excessive, deficient or blocked and illness results.

- **Every aspect of nature, including a person's surroundings, is said to have a direct impact on the body. In diagnosing an illness, a doctor of traditional Chinese medicine asks questions about all aspects of the patient's life in order to discern a "pattern of disharmony" that would indicate the specific imbalance that is causing the illness.**

- **Chi is said to travel over 14 major channels and numerous minor pathways, called meridians, in the body. Meridians do not correspond to any known system in Western medicine. In Chinese medicine, the meridian system links the inside of the body to the outside world. Nearly all acupuncture and acupressure points lie along meridians.**

- **Chi energy can be directed through acupuncture or acupressure (a form of deep tissue massage), various forms of meditation, the heightening of consciousness, and herbal preparations. These are the main treatments in Chinese medicine. The aim of treatment is to rebalance yin and yang and unblock the flow of Chi.**

- **Today the Chinese have a choice of medical treatments. They can be treated with traditional Chinese techniques, Western techniques, or a combination of both traditional Chinese and Western methods. The patient's decision about which treatment to pursue is usually based on the specific illness that he or she is experiencing.**

- **Some Western health-care professionals use concepts and techniques from Chinese medicine to treat their patients. They choose acupuncture, in particular, as a treatment for certain ailments and diseases such as chronic pain and addiction. Another practice that is gaining acceptance among Western practitioners is the use of meditation and other mental techniques to reduce stress and promote health.**

**GOALS**

- to examine traditional Chinese medicine in which the mind and the body are considered one entity
- to recognize similarities and differences between Chinese and Western approaches to health and healing
- to expand awareness of ways in which the mind may influence the body
- to learn about the healing traditions of other cultures.

At dawn people gather in a Beijing Park to perform the ancient art of Tai Chi Chuan.
BEFORE VIEWING

Introducing the Program

Tell students that they are going to perform a simple experiment. Ask each student to rub his or her palms together briskly for 10 seconds. Then have students hold their hands about 12 inches apart, palms facing each other. Suggest that they bring their hands slowly toward each other until they almost touch and slowly back several times. Ask them to concentrate on the sensation between their two palms and to describe what they feel. (Note: Some students may say that they feel nothing. Explain that some people feel nothing and that that is no cause for concern.) Tell them that several interpretations have been advanced to explain the sensation: one is that the sensation is caused by the body's energy field; another is that it is the result of stimulated nerve endings in the hands. Have students discuss both interpretations and explore the possibility that one or both explanations could be correct. After the discussion, explain that the belief that each body has a vital energy called Chi is central to Chinese philosophy and medicine. Tell students that the program they will see, "The Mystery of Chi," explores some of the ways in which the Chinese system of medicine provides a unique, nonwestern frame of reference regarding the human body and the mind. Suggest that as students watch the program, they examine the approach that Chinese medical practitioners take toward health and healing.

Terms/Vocabulary

You may want to write the following terms on the board in order to facilitate a discussion of the program: acupuncture, meridian, Tai Chi Chuan, Chi Gong, yin yang, scientific method. Definitions of these terms appear on page 12.

AFTER VIEWING

Discussion Questions

Encourage students to discuss the program and to share their observations. The following questions may be used to guide the discussion.

1. How does a Chinese medical practitioner view a patient? How does a Western medical practitioner view a patient? How might a doctor's beliefs affect treatment?

2. Why do you think the hospital featured in this program has both a traditional Chinese medicine section and a contemporary Western medicine section?

3. Do you think that most Westerners would like to have a choice of medical treatments as the Chinese do? Do you think that Westerners or their insurance companies would be willing to pay for such treatments? Explain.

4. What aspects of Chinese medicine do you think might be the easiest to adopt in the West? What might be the hardest?

5. Do you think the scientific method should be used to test Chinese therapies before they are recommended or adopted in the West? Is testing relevant or possible? How might such therapies be tested?

6. Do you agree with the belief underlying Chinese medicine that one's mind influences one's body, that is, can cause disease and promote health and healing? Why might this idea generate controversy?

STUDENT CARD

The student card, "Healing Around the World," presents traditional healing as practiced in several cultures throughout the world. Introduce the material by having students discuss some of the home remedies that their families may have used to treat illnesses. Ask them whether they believe the remedies work. Explain that in many cultures the beliefs in specific medical systems are deeply rooted in the cultures themselves. Duplicate and distribute "Healing Around the World" to students. After they have read the material, ask them to think about whether a person's belief in a medical treatment can affect the person's recovery.

ACTIVITIES

1. Many Chinese practice Tai Chi as a way of awakening and controlling their Chi. Some students may have studied a martial art or Tai Chi itself. Ask such students to demonstrate some of the basic movements to describe the philosophy of the art, or if possible, invite a martial arts instructor to give a demonstration for the class, or suggest that interested students visit a martial arts class.

2. The idea of balance, as shown in the concept of yin and yang, is central to Chinese medicine and philosophy. Have students examine aspects of balance in their own lives — food, exercise, work (school work, volunteer work, and work for income), social interactions, and entertainment or play. Encourage them to identify those aspects that are in balance and those that are not in balance. Suggest students write down their observations in their journals.

3. In the film, the master painter describes how he uses his imagination and Chi in his work — how mind and body work together. Have students describe how mind and body work together in something they do well, such as in an artistic, musical, or athletic skill.

SUGGESTED READING

THE MIND BODY CONNECTION

BACKGROUND/OVERVIEW

The mind’s capacity to affect physical health has long been acknowledged in a general way. But until recently medical science mostly regarded it as a complicating and amorphous factor — involving such vague elements as thoughts, emotions, and attitudes — that only got in the way of hard and clear science. For example, physicians have known for centuries that a person’s belief in a treatment is often as effective as the medicine used in the treatment. The effect — called the placebo effect — is so powerful that medical science guards against it when testing a new drug. People receiving a new drug are always compared with people who receive only a placebo, a dummy medication that has no medicinal value — to make sure the drug and not just the person’s faith is having an impact.

Today scientific researchers have found new ways to explore the mind’s effect on the body and to measure it in objective, quantifiable terms. Their work has begun to reveal the mind’s contribution to health and disease. The mind-body connection is becoming both an important part of modern medical theory and a practical way to help people maintain their health.

The recent investigations into the mind’s influence on the body falls into three areas: physiological research, clinical research, and epidemiological research.

Physiological research is aimed at determining the basic processes that connect the brain and nervous system with the rest of the body. The key development of the last decade has been the birth of psychoneuroimmunology (PNI), the effort to understand the links between the brain and the immune system, the physiological system that protects the body from infectious disease and plays a role in fighting cancer.

Building on groundbreaking experiments done in the 1970s by Robert Ader, a psychologist, and Nicholas Cohen, an immunologist, researchers in PNI have uncovered a rich array of connections between the nervous system and the immune system. They have now shown that nerve cells connect directly to organs of the immune system; that hormones responsive to stress, produced by the brain particularly a group of chemicals known as neuropeptides — are showing how the brain and the immune system may communicate. There is now every indication that the nervous system and the immune system speak the same chemical language and “talk” to each other continuously.

Clinical researchers use psychological approaches to try to affect physical health. The most acclaimed recent study of this sort was performed by David Spiegel, a psychiatrist, and his colleagues, who found that weekly group-therapy sessions dramatically increased the life expectancy of women with advanced breast cancer. Spiegel’s rigorously controlled study was the first to show that psychotherapy could extend the lives of some cancer patients. Other researchers are now trying to duplicate those results and are testing psychological approaches and stress reduction for people with physical problems as diverse as hypertension, migraine headaches, chronic pain, diabetes, and infertility.

Epidemiological researchers study large groups of people and try to find social and psychological factors that are associated with variations in illness and health. Numerous studies have now shown that people with strong “social support” — those that have a tight network of family and friends — live longer than people without such relationships.

As these scientists point out, their work is now at the threshold of reintroducing the concept of “mind” back into medical science. As their work continues, it is likely to bring about a revolution in the way Western scientists think about mind and body.

PROGRAM SUMMARY

In “The Mind Body Connection,” Program 2 of HEALING AND THE MIND, Bill Moyers interviews several scientists whose work challenges the centuries-old Western scientific model in which the body and the mind were considered separate entities. Using scientific methods, these scientists have found biochemical evidence that the mind and the body function as a single entity. Moyers asks Dr. Candace Pert about the implications of these findings for health and healing. The answers are startling yet harken back to the oldest folk wisdom. One of the most important findings is that our thoughts and emotions influence our immune system, the body’s first line of defense against infectious disease. For example, Dr. Robert Ader’s experiments show that the immune systems of lower animals can be trained both to be more susceptible and to resist infectious agents. Research by Dr. Dean Ornish has demonstrated that changing behavior can reverse heart disease.

As these scientists point out, their work is now at the threshold of reintroducing the concept of “mind” back into medical science. As their work continues, it is likely to bring about a revolution in the way Western scientists think about mind and body.
Introducing the Program
Use the following exercise to demonstrate the connection between mind and body. Announce to your students that they are going to take a test. Ask them to follow normal test-taking procedures (i.e., clear their desks, put books on the floor, etc.). Then ask students to describe how they feel physically, that is, how do their palms and throats feel? Are their hearts beating faster? Are their faces turning red? You will probably get a variety of responses, including references to cold hands and feet, sweating palms, warm or hot faces, pounding hearts, and so on. Ask why they think their bodies are reacting to a “mental message.” Have them give other examples of ways in which they think the body and the mind are connected.

After the discussion, point out that scientists are exploring the relationship between mind and body and have come up with some interesting results that will be described in the program they are about to see, “The Mind Body Connection.”

Terms/Vocabulary
You may want to write these terms on the board in order to facilitate a discussion of the program: biofeedback, endorphin, neuropeptide, neuroscience, psychoneuroimmunology. Definitions of these terms appear on page 12.

GOALS
- to recognize that mind and body communicate with each other
- to learn that emotions influence the immune system
- to examine research in the field of mind-body medicine
- to learn how the body’s immune system operates.

The Background/Overview was written by Harris Dienstfrey, editor of Advances, The Journal of Mind-Body Health, and Joel Gurin, science editor of Consumer Reports.

Discussion Questions
Encourage students to discuss the program and to share their observations. The following questions may be used to guide the discussion.

1. What effect do the following have on the immune system: emotions, rest, nutrition? Explain.
2. Why is the interaction of mind and the immune system important?
3. What are some things you might do to maintain your health? When you are ill, what do you do to get better?
5. How did the biofeedback experiment involving Bill Moyers suggest that the mind and body are connected?
6. What doubts do you have about the connection between mind and body? What evidence from the program seemed the most persuasive to you? The least?

SUGGESTED READING

ACTIVITIES
1. Have students work in small groups. Using what they have learned from the program and from the student card, “The Immune System,” students should create skits that depict how the body’s defense system fights disease. Tell them that the skits may be humorous. Give students time to present their skits to the rest of the class.
2. Encourage interested students to research and report on AIDS and why the body’s immune system has been ineffectual in overcoming the opportunistic infections associated with the HIV virus.
3. Have students give dramatic readings like those given by the actors in the program. After a short scene, have students take a few moments to monitor and describe their own physical feelings. Are their hearts beating fast? Are their pulse rates normal? What is their breathing like? Do they feel relaxed? Do responses depend on the kind of role played?
During the last 75 years, the burden of disease in the United States has shifted from acute, life-threatening emergencies to chronic illnesses, including hypertension, arthritis, cancer, asthma, chronic pain, and, most recently, AIDS. These illnesses are prevalent, expensive, and lethal: More than 40 million Americans suffer from hypertension; chronic pain accounts for $63 billion a year of our national health bill; and cancer claims 520,000 lives annually. Thirty years ago it seemed that these conditions could not be significantly altered by those who suffered from them. Now there is strong evidence that they are shaped and sustained, if not caused, at least in part, by our environment and our interpersonal world, by the ways we eat and exercise, work and play, think, feel, and act. We now know too that what we as individuals and societies can make worse, we can also, in many cases, improve.

One of our most powerful healing tools is our own mind. Since the 1960s, researchers have begun to map the pathways by which thoughts, emotions, and attitudes can affect the body and its various systems. Researchers are beginning to define routes by which anger and fear, despair and optimism can exert their influences on the central and autonomic nervous systems and through them on the heart and cardiovascular functioning, on the digestive, endocrine, and immune systems.

There are many ways to mobilize the mind to enhance the functioning and improve the health of the body. Since the 1960s, researchers have used the technology of biofeedback to demonstrate the mind’s capacity to regulate functions that had seemed automatic—among them, skin temperature, contractions of blood vessels, and the electrical patterns of the brain. Dr. Herbert Benson and his colleagues at Harvard have shown how meditation can produce physiological and psychological balance, which can, in turn, lower high blood pressure, decrease pain, and diminish the nausea that accompanies chemotherapy. Other researchers have demonstrated the reciprocal influence of the body and the mind. Behavior that improves physical functioning such as jogging on a regular basis can be as potent as antidepressants in relieving anxiety and depression. The mind can affect the body, and the body can affect the mind.

In the last 15 years, clinicians, inspired by this research, have begun to create comprehensive programs in which people with refractory conditions, such as chronic pain, cancer, AIDS, asthma, infertility, and anxiety can learn to help themselves and one another. The results are impressive. People who join these programs may use less medication and have less pain. They are less likely to go to an emergency room seeking treatment for an asthma attack, and have less trouble getting pregnant. There are increases in the quality and, in some cases, the length of their lives. The mutual support that is given and received in the programs makes measurable improvements in the physical well-being of the participants and in their outlook on their lives and illnesses.

The success of these programs is encouraging health professionals in public hospitals and in private offices throughout the country to develop similar programs that address the variety of chronic illnesses that in different ways beset them and their patients.

"Healing From Within," Program 3 of HEALING AND THE MIND, explores how Eastern meditation and Western group psychotherapy help people use their minds to improve the healing capacities within their bodies.

Moyers visits the Stress Reduction Clinic at the University of Massachusetts Medical Center to share the experiences of individuals suffering from severe medical problems as they learn to trust and practice a form of Buddhist meditation known as mindfulness. Their teacher is Dr. Jon Kabat-Zinn, founder of the clinic and an associate professor of preventive and behavioral medicine. We observe these individuals over a period of eight weeks as they work to gain control over their pain and anxiety by focusing their minds’ attention on their bodies. The concept of mindfulness becomes clear as the participants learn to focus in on the present moment, observing their breathing, body sensations, their thoughts and feelings, and then, learning to come to terms with their illness and their pain in new ways based on their experiences using meditation.

Moyers then visits the Stanford Medical Center in Palo Alto, California, and follows one group of women with metastatic breast cancer as they meet in weekly therapy sessions with psychiatrist Dr. David Spiegel. In an earlier study, Spiegel found that group psychotherapy appeared to prolong life in such patients. Under his guidance, the women come together to talk about their lives, their losses, and their disease. As they share their experiences of illness, they seem to reduce their own and one another’s anxiety and depression. In his conversations with Moyers, Spiegel expresses his hope that this sharing will not only reduce anxiety and feelings of helplessness but will also enhance coping skills and self-esteem.

Although the program examines pain and illness that may cause death, it is ultimately uplifting, for the viewer recognizes that the people whom he or she meets are learning that they do not have to feel like helpless victims but can become active individuals working to live and appreciate their lives as fully as possible while facing the actuality of their situations.

The accompanying student card: Wellness self-assessment.

PROGRAM SUMMARY

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BEFORE VIEWING

Introducing the Program

NOTE: This introductory activity requires a raisin for each student.

The following activity is featured in "Healing From Within" and is used to introduce people to meditation and the concept of mindfulness. The exercise may be used to introduce students to the concepts presented in the program.

- Give students the raisins (one to each), and ask them to inspect the raisins carefully and to describe their qualities.
- Have students bring the raisins to their noses and smell them.
- Have them put the raisins in their mouths and notice how they feel.
- Have students chew the raisins slowly, concentrating only on the taste.
- Finally, have students swallow the raisins, experiencing them as they pass down the throat, into the stomach.

Allow students time to discuss the activity. Point out how their mindfulness helped them to experience the raisin more fully in the present moment. Tell students that this and similar exercises are being used by medical practitioners to heighten awareness in patients as part of new healing therapies. Such therapies teach people who are ill how to use their minds to improve the potentially healing capacities within their bodies.

Terms/Vocabulary

You may want to write these terms on the board in order to facilitate a discussion of the program: cancer, chemotherapy, meditation, mindfulness, psychotherapy, stress. Definitions of these terms appear on page 12.

GOALS

- to examine the relationship between the mind and healing
- to learn about various healing therapies that are being used successfully by people who are ill
- to learn how the expression of feelings can positively affect a person's health.

AFTER VIEWING

Discussion Questions

Encourage students to discuss the program and share their observations. The following questions may be used to guide the discussion.

- What is your opinion of the healing therapies presented in this program? Would you pursue either of these therapies if you were ill? Why or why not?
- What evidence from the program suggests that the mind can improve the healing capacities of the body?
- Which of your activities do you feel keep you physically and mentally healthy? Could these activities help you to heal if you became ill? How?
- Does religion help you to heal? How?
- How does the support of family and friends help those who are ill?

STUDENT CARD

Introduce the student card, "Wellness Self-Assessment." Have small groups of students discuss what they consider to be the "perfect model of health." After the discussion, duplicate and distribute "Wellness Self-Assessment." Tell students that the purpose of the self-assessment is to get them to start thinking about their own health and how their behavior influences their health. Also, emphasize that this inventory is confidential and the answers will not be shared with anyone.

SUGGESTED READING


The Background/Overview was written by James S. Gordon, M.D., a clinical professor in the Departments of Psychiatry, and Community and Family Medicine at the Georgetown University School of Medicine.

ACTIVITIES

The following relaxation exercise can be used to help reduce stress. Students can do the exercise while sitting at their desks. Speak slowly and softly and pause frequently. It may be helpful to visualize each suggestion as you say it to give students adequate time to experience the exercise. Turning off the lights will help students focus inwardly. If you choose to do this, let students know when you are about to turn off and turn on the lights.

- Tell students you are going to guide them through a relaxation exercise but that they will be in control of their own experiences. They can go at their own pace, modify the instructions, or even fall asleep. Have students close their eyes, take a deep breath, and then exhale.
- Then say: Imagine that your entire body is filled with orange soda. It fills your head, your neck, your torso, your arms and legs, your fingers and feet. You are going to drain your body of the orange soda and with it all the tension and stress that your body is holding.
- Imagine the crown of your head and the soda slowly draining down—past your eyes and ears, your nose and mouth, and your throat—taking with it any stress and tension that had been holding. The soda is moving very slowly down past your shoulders and down your arms. Feel your body relax as the soda slowly drains out through your fingers.
- Now, it's draining down slowly through your torso—your body is relaxing, letting go of tension. It's slowly moving down your legs, your feet, and out through your toes.
- Imagine taking a few paper towels and blotting up any pools or drops of soda that might still remain. Stay here for awhile, just feeling your breath moving in and out of your body. (2 or 3 minutes of silence) Can you feel your body as whole? How does it feel in this moment, in this silence, in this stillness? (2 or 3 minutes of silence) When you feel ready, take a deep breath letting it in, letting it out, and allow your eyes to open.
- Give students a few minutes to readjust. Allow time for them to discuss their experiences of the exercise.
The traditional function of hospitals since they were founded more than 2000 years ago by Buddhists in India has been to provide full medical care to those who are ill or injured. The quality and quantity of services that hospitals provide increased dramatically as a result of the impact of major medical advances beginning in the early 19th century. Those advances included the discovery and the use of anesthesia, the introduction of antiseptic techniques, the use of X-rays, and the establishment of nursing schools. Twentieth-century technological improvements have also enhanced the ability of hospitals to diagnose and treat a variety of diseases. Today hospitals serve a much broader function by providing many services ranging from counseling to wellness clinics to health fairs for both the ill and the healthy.

The heart of any hospital transcends its technology. The core of a hospital’s effectiveness is its staff — especially patient-support services — doctors, nurses, technicians, and volunteers — on whose expertise and care the patient’s life depends. Until fairly recently that care tended to focus on treating disease as if it were separate from the person being treated. People entered hospitals where they became powerless “cases” controlled in a laboratorylike manner through the imposition of impersonal hospital procedures, rules, schedules, and technology. Now clinicians and researchers are demonstrating how the atmosphere and the style of treatment can promote healing.

Evidence that mind and the emotions play an important role in health has motivated some hospitals to create environments that support the emotional as well as the medical needs of patients. These efforts include the following:
- decentralizing nursing care so that a patient is cared for by a few “regular” nurses rather than with an army of temporary ones
- helping patients learn more about their diseases, the procedures involved in treating them, and how they can promote their own recovery
- encouraging patients to ask questions
- making the hospital environment appealing by creating a homelike atmosphere, which includes comfortable furniture, flexible visiting hours, and fewer restrictions on who may visit
- expanding counseling and psychological and emotional support provided for patients
- allowing patients to see and discuss their medical records
- training health-care workers to use compassion when working with patients.

The goal is to help patients become active participants in their own recovery, which will produce faster rates of recovery, less anxiety when entering and leaving a hospital, and continued improvement after returning home.

In “The Art of Healing,” Program 4 of HEALING AND THE MIND, Bill Moyers visits several American hospitals that are altering their procedures and physical environments in order to meet patients’ emotional and psychological needs as well as treat their illnesses. In his interviews with patients, doctors, nurses, and hospital consultants, Moyers explores such issues as the impact of serious illness on the family and how hospitals are addressing the family’s needs; how hospitals are helping patients allay the fear of illness; how health-care workers are being encouraged to listen and respond to patients; and how hospital staffs are attempting to reduce “hospital anxiety” by using art, humor, massage, hand-holding, and other forms of person-to-person bonding. These new models of medical care are helping patients heal faster, leave the hospital earlier, and do better when they get home.

**GOALS**

- to recognize the new methods that hospitals are using in treating patients and their families
- to understand that every individual has a responsibility for his or her health
- to recognize the importance of patients’ emotional well-being to their overall health and recovery
- to understand the value of family support in a person’s recovery from illness.

In an effort to help people take part in their own health and well-being, a nurse shows a six-year-old girl how to read her temperature.
Introducing the Program

In “The Art of Healing” we see how touch — from therapeutic massage to the cradling of a premature infant — is used to help people heal. The following activity involving a handshake can help students recognize the various feelings that can be communicated by touch. Have students work in pairs. Ask them to stand or sit so that one partner’s back is aligned with the chalkboard. Tell the class that you are going to write the names of three emotions or feelings on the chalkboard and that you want the other partner, the person facing the board, to communicate each of those feelings, one at a time, to his or her partner with a handshake or by touching the partner’s hand in some other way. Write the following on the board: fear, compassion/reassurance, joy. Have partners discuss their reactions after each touch. Then ask partners to change places and repeat the activity to show the following feelings: anger, sorrow, victory. When students have completed the activity, ask them to discuss their feelings: how they felt as initiators and recipients of each touch.

Explain that many hospitals are helping patients to heal in ways that are new to hospital settings. Health-care professionals are using touch, compassion, and other forms of communication to help patients recover more quickly. Tell students that the program they are about to see, “The Art of Healing,” examines how several hospitals in the United States are using new ways to treat premature infants as well as chronic diseases and to alleviate stress.

Terms/Vocabulary

You may want to write these terms on the board in order to facilitate discussion of the program: allopathic medicine (conventional medicine), bonding, curandero, holistic medicine, imagery, self-care, wellness. Definitions of these terms appear on page 12.

Discussion Questions

Encourage students to discuss the program and to share their observations. The following questions may be used to guide the discussion.

1. What do medical personnel hope to achieve by making changes in the way patients are treated in hospitals?
2. How are hospitals helping patients’ families? Does this kind of assistance ultimately help patients? How?
3. Why is it important for premature babies to be held and touched? What do you think is communicated by touch?
4. What have your experiences in hospitals been like? How might they have been better?
5. How might you support a family member who is ill and needs to be hospitalized?

STUDENT CARD

The student card, “Taking Charge of Your Health,” will suggest to students ways of thinking about maintaining and promoting their health. Introduce the student card by having small groups of students discuss the responsibilities of both a doctor and a patient. Have one person from each group share the group’s conclusions with the class. Allow time for class discussion. Then duplicate and distribute “Taking Charge of Your Health.”

ACTIVITIES

1. Using what they have learned from the program and the student card, “Taking Charge of Your Health,” students should work in groups of three to role-play the situation described below. Make up sets of index cards featuring the following information, and give one set to each group. Ask each group member to take and read only one card.

Card 1: Dr. Ortega

Mrs. Hanson has been complaining of occasional severe stomach pain. You would like her to undergo some tests so that you can determine what is wrong and how to treat her. She seems resistant to the idea. Your goal is to allay her fears and convince her to be tested. You will begin the role play by initiating a dialogue with Mrs. Hanson.

Card 2: Mrs. Hanson

You have been experiencing occasional severe stomach pain. You tell your husband the condition is not serious and will pass soon, but secretly you are frightened that something is terribly wrong. You want to be cured but, because of previous hospital experiences, are afraid of going to the hospital for tests. Your goal is to find out all you can about your condition and persuade the doctor to prescribe medicine you can take at home.

Dr. Ortega will begin the role play.

Card 3: Mr. Hanson

Your wife has been experiencing severe stomach pain. You are very worried, even though she says it is nothing. You believe that she needs to be tested to find out what is wrong. You like the doctor and want to cooperate in every way possible. Your goal is to support your wife emotionally and to convince her to undergo appropriate tests. Dr. Ortega will begin the role play.

Allow groups ten minutes to enact their role plays. Then allow each group time to discuss the role play and determine whether they interacted in constructive, supporting ways. Allow groups time to share their observations with one another.

2. Design a project in which individuals or groups of students research and report on the services provided by area hospitals. Students can begin by contacting the public-relations officer at the hospital or by interviewing people who have been patients at the hospital. Suggest that they research the following: emergency-room care, aftercare, patient-support services, support groups/programs, social workers, nutritional counseling, and the like. Have each group present an oral report to the rest of the class.

SUGGESTED READING

In our culture, illness is often viewed as a kind of mechanical breakdown. Many believe that to overcome sickness, all we need do is fix the broken part. However, many medical professionals are recognizing the need to treat illness as more than an isolated physical problem. They realize the importance of treating the whole person. They also make a distinction between curing and healing. "Curing" describes an external process used to treat a specific disease. Even patients who have a terminal illness and cannot be cured, these medical professionals say, can often be healed.

Some health-care experts, such as Michael Lerner of the Commonweal Cancer Help Program, distinguish healing from curing. Lerner says, "Healing is a process of becoming whole. It can happen at a physical level, as in wound healing. It can also occur at an emotional and spiritual level. It is a movement toward wholeness that seeks out physical recovery whenever possible."

Psychotherapists and physicians with this view of health not only encourage patients to get conventional treatments, but also promote other therapies including diet, exercise and the exploration of feelings, beliefs, and attitudes towards life. From the perspective of these health-care professionals, illness can become an agent of transformation. This process can promote an expanded self-knowledge and understanding of life even while, in the case of terminal illness, revealing the painful reality of approaching death.

Healing can be fostered through a number of approaches that complement conventional therapies. They can increase a person's sense of well-being and decrease his or her fear. Such approaches include non-competitive physical exercise, dance, poetry, art, and group discussions of the experience of illness itself. Leaders in the field advocate the following approaches, among others, to facilitate healing:

- Meditation and yoga help people relieve stress and anxiety, develop inner peace, understand the body's needs, and experience the psychological well-being that can result from relaxation and gentle physical exercise.
- Expression through the visual arts, poetry, and dance can be therapeutic. For the ill, these art forms help expand self-awareness and restore a sense of wholeness by providing opportunities to creatively explore and communicate the difficult experience of illness and explore its personal meaning.
- Support groups provide a place for participants to overcome the sense of loneliness and isolation that frequently accompanies serious illness. In such groups, people share their anxieties, hopes, feelings of guilt, questions, and strengths. This sharing is a source of empowerment that enables the participants to better deal with their illness and their lives.

Such approaches can play an important role in overcoming the stress and psychological pain of traumatic illness. They can help the seriously and terminally ill confront sickness and mortality and draw on the strength and inner resources which are part of every human being.

In "Wounded Healers," Program 5 of HEALING AND THE MIND, Bill Moyers visits Commonweal, a health education and research center in Bolinas, California, that offers week-long stress-reduction and healing retreats for people with cancer. He witnesses the experience of a group of people as they learn to navigate the life passage called cancer. As these people meet together under the guidance of Michael Lerner, Ph.D., founder and president of the Commonweal Cancer Help Program, and Rachel Naomi Remen, M.D., its medical director, they share feelings of isolation, guilt, fear, rage, despair, hope and love.

At Commonweal they talk openly and emotionally about their illness, their medical treatment and the effect of both on their bodies and spirits. As the sessions progress, we see how this sharing and bonding allows them to find new meaning in their experience and helps them to heal themselves and each other. In a remarkable scene, Lerner and Remen share with the group their personal experiences and feelings about serious illness and death. Their intimacy provides a breathtaking contrast to the way many doctors distance themselves from patients as individual human beings.

"Wounded Healers" witnesses the healing approaches offered at Commonweal. The program illuminates how the gentle touch or voice of another human being can both reassure and ease emotional pain and perhaps even strengthen the will to live. It also shows that massage, yoga, art, experiencing nature, and simply walking on the beach with a newfound friend can all contribute to the healing process.

The program often evokes deep sadness, yet it has moments of humor and optimism. Our last image of the participants is one in which they are smiling and hugging, filled with love and hope.

NOTE: Please preview "Wounded Healers" before showing it to your class. This program may be emotionally distressing for some students. They may react by acting out or getting extremely upset. Students need to be aware of these possibilities and given permission to "tune out" or leave the classroom, if they cannot deal with the subject matter. The program may seem sad at the start but students who see it to the end will receive a powerful message about the importance of love and relationships and the strength of the human spirit.
BEFORE VIEWING

Introducing the Program
This activity will allow students to express their feelings about serious illness, death, and their own strengths in a non-threatening way. It will also bring into focus the universality of these feelings.

Distribute index cards to students. Ask them to write a sentence describing their deepest feelings about terminal illness or death as it relates to them or to those close to them. Also ask them to write a sentence describing one inner strength that empowers them. Remind them not to write their names. Collect the cards, shuffle and redistribute them. Have each student, in turn, read aloud the card he or she has received. Have students discuss their reactions to the feelings expressed by their classmates. Ask students how their strengths might help them to deal with a serious illness or a loss.

Tell students that the program they will see, "Wounded Healers," visits the Commonweal Cancer Help Program, where participants come, not to be cured, but to search for emotional and spiritual healing.

GOALS

- to recognize the difference between curing and healing
- to understand that many people share similar feelings and fear about illness and death
- to understand the importance of relationships and giving and receiving help in the healing process.

AFTER VIEWING

Discussion Questions
Encourage students to discuss the program and share their observations. The following questions may be used to guide discussion.

1. What part of this program was the most difficult for you to deal with? What part did you like the best? What did you see that you haven’t seen before?
2. Is there a difference between curing and healing? Explain.
3. What feelings did you have towards the people in this program who were seriously ill? Did you learn something about relating to people who are ill? What would you do if someone close to you became ill?
4. Are you able to ask for and receive help the way the people in this film do? Are you willing to give support? What, if anything, stands in your way?

STUDENT CARD

The student card, “The Circle of Life,” will introduce students to the rituals and celebrations that various cultures celebrate to mark passages through life. Before distributing the card, have students discuss milestones in their lives and the ceremonies that mark them. Students may mention such ceremonies as baptisms, bar mitzvahs, sweet-sixteen parties, graduations, and marriages. Ask them to think about how participation in these ceremonies marks an individual’s new relationship to the community.

Discuss how feeling part of a community (either through formal ceremonies, organized group participation, or personal relationships) might have a role in healing. At this time duplicate and distribute “The Circle of Life” (two sides).

SUGGESTED READING

acupuncture a healing technique from China in which needles are inserted into the body at acupoints that correspond to various internal organs and functions. The acupoints lie along energy pathways called meridians. The stimulation by the needles is believed to increase or decrease Chi, returning organs to a more harmonious and healthy state.

allopathic medicine (conventional medicine) medical practice that treats illness by methods directed at opposing particular symptoms and disease states. Allopathic medicine is practiced mainly in Western Europe and the United States.

biofeedback a method of treatment that utilizes electronic devices to detect subtle changes in body states. The feedback can be used to reach optimal states of relaxation and even to direct some body functions not normally under conscious control.

bonding feelings of attachment, trust, or kinship with another person.

cancer a group of diseases characterized by unregulated cell multiplication.

chemotherapy a cancer treatment that utilizes a specific chemical agent to eradicate or arrest the progress of cancer without causing irreversible injury to healthy tissues.

Chi in Chinese philosophy the human body’s vital energy. It is akin to “matter on the verge of becoming energy or energy at the point of materializing” into matter. Optimally, Chi circulates freely throughout the body. When the body’s yin and yang properties are in balance, Chi flows smoothly and the person is healthy. When yin and yang are out of balance, Chi is excessive, deficient, or blocked and illness results.

Chi Gong a system for controlling Chi (energy) that can be applied to healing or to the martial arts.

curandero a lay healer who treats patients by prescribing herbal remedies and performing ritual ceremonies. Curanderos practice in Latin American and in Latino communities throughout the world.

endorphin any of a group of proteins that occur naturally in the brain and have the ability to counteract pain and to produce a relaxed feeling of well-being in the body.

health (from Old English hal, meaning “whole”) the condition of being sound in body, mind, and spirit.

holistic medicine a medical philosophy that views the individual as an organic whole, as having mental, physical, emotional, and spiritual aspects that contribute to the creation of health or illness.

imagery a form of therapy based on the use of directed meditation or hypnosis. A person first achieves a state of relaxation and is then guided by a therapist through an imaginary experience. The principle is to assist the individual to hold an image in the mind that will lead to physical healing.

meditation a wide range of methods used for expanding the boundaries of human development, self-knowledge, and wisdom involving a systematic nonconceptual focusing of attention in the present moment with a nonstriving and noncalmness and stability of mind. It is commonly practiced as a formal daily discipline with the body held in relative stillness.

Some forms of meditation, such as calligraphy, tai chi, flower arranging and hatha yoga, however, emphasize the harmony of inner and outer experience in motion.

meridian in Chinese medicine any of 14 major channels or minor pathways in the body. The meridian system links the inside of the body to the outside world. Nearly all acupuncture and acupressure points lie along meridians.

mind all categories of human experience (perception, cognition, intuition, instinct, and emotion) at all levels, including those commonly termed conscious, subconscious, superconscious, and unconscious.

mindfulness paying attention from moment to moment in the service of perceiving with insight and clarity what is actually occurring at the time it happens. Mindfulness meditation is that class of meditative practices that extends attention beyond one-pointed concentration to cultivate a nonjudgmental, open awareness of the entire field of potential human experience and understanding in the present moment.

neuropeptide strings of amino acids found in the brain and throughout the body. Called the biochemicals of emotion, neuropeptides form the communication network within the body.

neuroscience a branch of the life sciences that deals with the anatomy, physiology, biochemistry, or molecular biology of nerves and nervous tissue and their relation to behavior and learning.

psychoneuroimmunology a field of medical science that studies the interrelationships among the mind (psycho), the nervous system (neuro), and the immune system (immunology) in health and in illness.

psychotherapy the treatment of mental or emotional disorders or related bodily ills by psychological means.

relaxation response a technique that incorporates traditional forms of meditation and passive states of mind to achieve a deep state of relaxation that measurably affects the body’s physiology.

scientific method principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses.

self-care the practice of taking responsibility for maintaining a day-to-day balance in one’s emotional and physical life in order to stay healthy.

stress bodily or mental tension resulting from internal and external factors that tend to disrupt the state of equilibrium.

Tai Chi Chuan a traditional Chinese meditative exercise and martial art involving slow, graceful movements and mental concentration intended to harmonize mental and physical functions.

wellness a state of health, happiness, vitality, and wholeness of the mind and body.

yin/yang in Chinese philosophy the dynamic, opposing but complementary forces that are present in all things — animate as well as inanimate objects.
The following books may be of interest to those who want to learn more about the topics presented in HEALING AND THE MIND WITH BILL MOYERS.


Within the last 100 years, modern scientific medicine has made tremendous progress. For example, immunology has led to the successful treatment of many serious diseases; technology and computers now aid physicians in both diagnosing and treating diseases and injuries; the discovery of insulin and other hormones has prolonged the lives of many people.

Yet long before the advent of modern medicine, men and women searched for the causes of disease and their cures. There is evidence, for example, that ancient Peruvians performed brain surgery, that the people of the Stone Age used medicinal plants to cure ailments, and that the ancient Egyptians prescribed herbal remedies for crocodile bites. Retaining their vitality as manifestations of cultures and belief systems, many traditional healing customs are practiced today. Inherent in many of those traditions are the ideas that there is a mind-body interaction, that there is a relationship among people, the environment, and the cosmos; and that the spiritual realm plays a part in a person’s life and in healing.

As you read about healing traditions in other parts of the world, compare them to your own beliefs about health and healing. Which aspects of these traditions might you incorporate into your own health model?
Ayurveda is a form of medicine widely practiced in India. It means "life" (ayus), "science" or "knowledge" (veda), and is thousands of years old. The underlying idea of Ayurveda is that health is the result of balance between the spirit and the body. The goal of ayurvedic treatment is to restore the balance and enable the patient to achieve "right living" rather than just freedom from illness. Every aspect of a person's life is taken into account when he or she is being treated.

Each person is classified as a type, or dosha—air, fire, or water. Depending on a person's dosha, a doctor of Ayurveda may prescribe various types and combinations of massage; herbal preparations (applied externally or taken internally); changes in diet, sleeping position, and/or personal hygiene; activities to induce sweating (i.e., a steam bath); breathing practices; and meditation.

In China, a doctor prepares a remedy for a person who is ill. The herbal preparation is boiled and the tea consumed. Here the doctor is measuring out a six-day supply.

In Latin America and among Latinos in the United States, a person who is ill may visit a curandero, a lay healer, who may prescribe herbal teas and provide a ritual ceremony involving the burning of candles. Just as important as the ritual, however, is the spiritual connection between the patient and the curandero, a trusted member of the community.

Botanicas, small stores found throughout Latin America and the United States, sell merchandise intended to help people improve their health, financial condition, love life or other aspects of their lives. Potions, charms, herbs, incense, statues of saints and other holy people, and shark jaws are among the merchandise sold.

Homeopathy is a form of treatment in which diseases are believed to be cured by using small amounts of substances that would bring about in healthy people the very symptoms the patient is experiencing. For example, to treat fever a doctor of homeopathy would give a patient a remedy — a small dose of an extract from a plant, an animal, or a drug — that would raise the patient's body temperature. In homeopathy, a symptom is a sign that the body is curing itself. This viewpoint differs from Western medicine (allopathic medicine) that attempts to eliminate symptoms.

Homeopathy, which originated in Germany in the 1800s, was widely practiced in the United States, Europe and South America before 1900 and is still popular among many people today.
THE IMMUNE SYSTEM

Your immune system is your body's defense against thousands of invisible enemies—viruses, bacteria, other microbes, and pollutants—that can and do attack the body continuously. A highly intricate system made up of cells that carry out specific tasks; your immune system has the ability to identify anything that is "self" and everything that is "not self."

Scientific research has found that the brain communicates with the immune system by means of neuropeptides, chemicals produced by nerve cells in the brain and in other parts of the body. Neuropeptides seem to fluctuate with emotional states. Scientists therefore conclude that the emotions can influence the immune system.

WHAT HAPPENS WHEN AN ENEMY INVADES YOUR BODY?

1. Macrophages engulf cells invaded by virus. Wearing the antigens of the virus, they display them to Helper T-Cells that have been called to action.

2. Helper T-Cells lock onto the antigens and begin to multiply. They release a chemical that brings killer T-Cells and B-Cells into action.

3. The B-Cells multiply and produce specific antibodies that bind to the antigens, preventing them from invading other cells.

4. The Killer T-Cells destroy cells that have been invaded by the virus. Without host cells, the virus can no longer replicate.

5. Macrophages engulf the inactivated virus.

6. Once the virus has been eliminated, Suppressor T-Cells signal the B- and Killer T-Cells to stop the attack.

7. Memory B- and T-Cells stay on the alert. If the same virus enters the body again, these cells will meet it instantly and destroy it.

ENEMY

Virus unit of genetic material that must enter a cell in your body in order to replicate (other enemies include bacteria, fungi, and protozoa).

DEFENDERS

Macrophage a scavenger cell that looks for and collects invaders and cellular waste. When it finds an enemy, it alerts Helper T-cells.

Helper T-Cell recognizes the enemy and calls B- and Killer T-cells in the spleen and lymph nodes to fight the invaders.

Killer T-Cell kills cells invaded by an enemy as well.

Antibody protein that matches the antigen of a specific enemy. Attaching to the enemy, the antibody signals macrophages to move in for the kill.

B-Cell responds to Helper T-Cells by replicating and then producing antibodies, chemical weapons for fighting enemies.

Suppressor T-Cell signals B-Cells and Killer T-Cells to call off the attack after the enemy has been overcome.

Memory Cell specialized B- or T-Cell that remembers the shape of a specific invader. If this invader enters the body again, the memory cell will recognize it and will begin an immediate defense.
You can take a more active role in keeping yourself healthy, and even helping yourself recover more quickly when you are ill or injured. It is often hard to feel in control when you are not well. First, you feel sick. Second, you may know very little about the illness or injury, the treatment, and the length of time it will take you to recover. Some of us surrender our responsibility to a physician in the hopes that he or she will take charge of our recovery. Yet it is often our feelings of utter dependence on a physician that make us feel helpless. It doesn’t have to be that way. Whether we are healthy or ill, we can and should be active participants in our own health and healing.

Realizing that we can make choices can help us take control of our well-being. There are many decisions that we can make. Among them are when to seek help, which physician to choose, and what type of treatment to pursue. Here are some points to consider when making choices about your health:

- **Choose a doctor you feel comfortable with.** A doctor is a trained medical specialist who can do something that you cannot do — diagnose your illness, and prescribe treatment and medication, if necessary. Even though a doctor has specialized knowledge, he or she does not know your body and your life as well as you do. That is why it’s important to think of your relationship with your doctor as a partnership — both of you will work together to help you stay healthy or recover if you become ill or sustain an injury.

You also have the choice to change doctors if you are not satisfied. If you do not get the kind of information you need, if you think you are not getting better, if you are confused and worried, discuss these problems with your doctor. If you still feel dissatisfied, you have the right to change doctors.

- **Be completely honest with your doctor** both in answering any questions and in filling out the medical history form. This is important information the doctor needs to know in order to help you remain healthy or help you recover your health.

- **Ask questions.** You should receive as much information about your illness as your doctor can give you. You should ask what illness you have, what causes it, what treatments are possible, what treatment the doctor recommends, what side effects you may experience, and how long the treatment will last. Such information should be explained to you in language that you can understand. If you don’t understand something, ask the doctor to repeat it or explain it in simple language.

- **Educate yourself** about the illness or injury. Learn as much about it as you can. Find books and articles in your local library, or contact national foundations or agencies. Knowing about your disease or injury will help you make decisions and will give you a sense of control.

- **Make decisions.** Take part in all decisions about your health. If you require hospitalization or medical tests, you should know why and what the cost will be. Before you agree to be hospitalized, or take a specific test or medication, learn what other options are available to you.

- **Follow the treatment.** Once you understand what it is and agree to it, follow the treatment your doctor prescribes. Often when patients learn that their ailment isn’t serious, they are so relieved that they fail to follow the prescribed treatment for the lesser ailment. Also, tell the doctor about any problems that develop after you have begun treatment.

- **Ask for help.** If you are ill or injured and need help, seek assistance from family or friends. Allowing someone to help you can be as simple as asking for a box of tissues or as complex as asking someone to accompany you to the hospital for testing. Obtaining support reaffirms your belief that people care about you and your well-being.

**TAKING INVENTORY**

Take a look at the choices you make that affect your health. Write down the positive ones — the things you do or the choices you make that keep you healthy or improve your health. Then record the negative ones — the things you do or the choices you make that might be detrimental to your health. Think about ways in which you can change the negative ones into positives and whether you are willing to make those changes. Remember that this inventory is for your personal use only. You do not have to share it with anyone unless you want to.

![Image of a nurse showing a six-year-old girl how to read her temperature.](Photo: Barrows Photo Researchers, Inc.)

In an effort to help people take part in their own health and well-being, a nurse shows a six-year-old girl how to read her temperature.
These statements are designed to help you assess your health and add to your awareness and understanding of your overall health. Circle the number before each statement which you believe to be an accurate description of yourself.

SECTION 1

Nutrition
1. I limit my consumption of high-fat foods (eggs, dairy products, fatty meats, fried foods).
2. I limit my consumption of salt and salty foods.
3. I eat fish and poultry more often than I eat red meat.
4. I eat 5 servings of fruits and vegetables a day.
5. I limit my intake of sweets, sodas, and snack foods.
6. I drink several glasses of water a day.

SECTION 2

Emotional Well-Being
1. I laugh often and easily.
2. I can ask for help when needed.
3. I include relaxation time as part of my daily schedule.
4. I have someone with whom I can discuss personal problems.
5. I can express concern and love to those I care about.
6. I can express my angry feelings rather than hold them in.
7. There is a healthy balance between my work (school and job) and leisure time.

SECTION 3

Fitness
1. I am within the normal weight range for my gender, height and age.
2. I keep in shape by doing vigorous exercise (biking, swimming, running, sports, aerobics, etc.) for at least 30 minutes three times a week or doing moderate exercise (like walking) an hour a day.
3. I stretch, do yoga, or move my body regularly in a variety of ways to keep it supple and flexible.
4. I regularly engage in activities (weight training, work that involves moving heavy objects, sports that work the whole body) that develop over-all strength.
5. I am pleased with the way I look and feel.
6. I have enough energy to do the things I like to do.

SECTION 4

Family History
I have a family member who:
1. Had a heart attack.
2. Had or has high blood pressure.
3. Developed diabetes as an adult.
4. Had or has breast cancer.
5. Had or has a drug or alcohol problem.

SECTION 5

Alcohol, Nicotine, and Other Drug Use
1. I do not smoke cigarettes or chew tobacco.
2. I do not use alcohol.
3. I do not use marijuana or other drugs.
4. I ask about the side effects of any prescribed medications.
5. I read and follow the instructions on all prescribed or over-the-counter medications.
6. I ask about the effect of taking more than one medication at a time.
7. I am aware of the dangers of alcohol, nicotine, and other drugs.

SECTION 6

Accidents
1. I do not accept rides from drivers who have been drinking or taking drugs.
2. I wear a seat belt whenever I am in an automobile.
3. I wear a helmet when I ride a bicycle or motorcycle.
4. I obey all traffic and safety rules.

SECTION 7

Human Values
1. I take part in activities that stimulate me intellectually.
2. I participate in family, church and/or community events.
3. I stand by my own values even when they are different from those of my friends.
4. I use my thoughts and attitudes in life-affirming ways.
5. I accept other people's ideas and values even though they may be different from my own.
6. I believe in a positive force that supports my well-being.

SECTION 8

Self-Care
1. I have yearly dental and medical check-ups.
2. I get at least 8 hours of sleep a day or sufficient sleep for me to awaken feeling rested.
3. I am aware of bodily changes that might indicate a health problem.
4. I know how to do self-examinations.
5. When I am ill, I rest and follow the doctor's treatment.
6. I know what to do in case of illness or injury.
7. I do not participate in behavior that could be dangerous to my health.
8. I know how to prevent the transmission of STD, and HIV/AIDS.
A PORTRAIT OF YOUR HEALTH
Use your responses for each section to complete the graph. The results will give you an overall picture of how you view your health. For each section, shade one box for each statement you circled.

SECTION 1
Nutrition

SECTION 2
Emotional Well-Being

SECTION 3
Fitness

SECTION 7
Human Values

SECTION 6
Accidents

SECTION 5
Alcohol, Nicotine, and Other Drug Use

SECTION 8
Self-Care

EVALUATION KEY

Completely Shaded Sections: Healthy behavior and life-style choices. Keep it up!

Partially Shaded Sections: A little more effort and attention to these issues can improve the quality and length of your life. Work a little harder!

Barely or Not At All Shaded Sections: There is significant room for improving your health in these areas. First, work on areas where you feel confident of success, then attack the areas that are more difficult for you.

Note: This graph does not include Section 4: Family History, since you have no control over this area of your life. However, it is helpful to be aware of health issues that may be hereditary and use this awareness to pay particular attention to preventative steps that can help you avoid these conditions.
Existence is a circle, and we err when we assign to it for measurement the limits of the cradle and the grave.

Manuel Acuña


Those who face serious illness reflect on their lives and their life passages as they search to heal themselves. They strive to understand their illness as part of the life experience. In many cultures, a person’s journey through life is honored by celebrations and rituals. The ceremonies of birth, initiation, marriage and death each mark a rite of passage in this circle of life.

BIRTH AND CHILDHOOD

The rituals welcoming children into the world mark a time of great joy and solemnity as new life is received into the community. Baptism in the Catholic religion is a community affair in which the newborn, bathed in holy water, is cleansed of original sin and welcomed into the church community.

In the Cameroonian rainforest, newborns are welcomed through a ceremony of anointment. A family matriarch rubs the baby with the juice from the ngele tree that is both medicine and “holy water.”

INITIATION AND ADOLESCENCE

Adolescence is a pivotal stage in the passage from childhood to adulthood. In many cultures there is a ceremony of initiation into the adult world which consists of an ordeal or trial through which adolescents learn and accept what is expected of them. In the Candomblé culture of Brazil, a boy becomes a member of the community through an ancient ceremony that takes place over several months and involves intense preparation. During this time, the boy is believed to be possessed by a spirit that helps him pass into adulthood and be received by society with a new status.

Young women in the African country of Zaire receive their initiation at the onset of menstruation. While secluded in a menstrual hut for up to a month, these young women are taught by older women about sex and child rearing. At the conclusion of this instruction, the young women are reintroduced to the community as new women and potential brides.

MARRIAGE AND ADULTHOOD

The marriage ceremony sanctifies the union of a man and woman. It marks the end of their separate lives and the beginning of a new life together. In all societies, marriage is a time of celebration and joy. In Western cultures, the bride is showered with rice in a tradition that dates back to the Middle Ages. It symbolizes the community’s wishes for the new couple to experience fertility and good fortune. The veil worn by the bride is an ancient symbol of purity. In communities from the Caspian Sea to the border of China, the bride wears a cone-shaped hat as a symbol of celebration and joy.

In India, a couple weds in a traditional ceremony.

In a rigorous four-day ceremony, attended by members of her tribe, this young Apache girl performs rituals that celebrate and affirm her passage from childhood to womanhood.
DEATH

In every society there is a rite to honor the deceased and consecrate their passage to the next world. These rites help the survivors make the transition from anger and grief to acceptance as well as to confront their own mortality. In the Chinese traditions of Taoism, Buddhism and Confucianism, death is considered a passage to rebirth. Dressed in white, the traditional Chinese color of mourning, grieving relatives and friends accompany the body to the cemetery. They ignite firecrackers to ward off unfriendly spirits. When the coffin is placed in the ground, family members perform an act of closure by tossing a handful of dirt on the grave. Closure is an important facet of death rituals.

In Andean villages of Peru, closure does not occur until a year after death. The clothing of the deceased is ritually laid out on a table and surrounded by candles. Mourners pray all night around these symbols of the departed. By morning, it is believed that the living and the dead are both free to move on.

WHAT'S THE WISDOM?

The people in “Wounded Healers” face some basic issues that people have faced since the beginning of time. Ask yourself these questions. Ask them throughout your life. They may help you to live more consciously, to enrich your life and to grow in wisdom. As time passes, the answers may change.

- What is a healer?
- What is a healing community?
- What is loss?
- What is communion?
- What is a hospital?
- What is strength?
- What is weakness?
- What is wisdom?
- When have you helped a person to heal?
- What is a place of healing?
The following organizations provide information about the various subjects presented in HEALING AND THE MIND WITH BILL MOYERS. Check your telephone directory for other organizations in your area.

**MIND-BODY PUBLICATIONS**

**Advances: The Journal of Mind-Body Health**
Fetzer Institute
9292 West KL Avenue
Kalamaizoo, MI 49009
(616) 375-2000
A quarterly journal published by The Fetzer Institute that reports on developments in the study of mind-body health and explores their implications for health care, medical training, and further research. The journal provides a common forum for the many health professionals who are concerned with mind-body studies—researchers, health-care providers, medical administrators—and for general readers who are intrigued by the new perspective that these studies bring to the maintenance of health and the treatment of illness.

**Mental Medicine Update**
The Mind/Body Health Newsletter
The Center for Health Sciences Institute for the Study of Human Knowledge
P.O. Box 176
Los Altos, CA 94023
(415) 948-9428
A quarterly newsletter that focuses on the effects of mood, personality, social support, and other psychosocial factors on health. Geared to both professionals and lay people, it contains articles on the latest clinical research, practical self-help guides, and reviews of books and tapes.

**Planetree Library**
Tracey Cosgrove
2040 Webster Street
San Francisco, CA 94115
(415) 923-3681
A medical library and book store that provides the latest research on health topics, including treatment options, experimental programs, and complementary therapies such as Chinese herbal medicine, homeopathy, and aromatherapy. It refers callers to national health organizations and provides contact information about the various subjects presented in their curricula. The workshops offer a variety of techniques derived from both Eastern and Western traditions, including relaxation, imagery, movement, community building, and cognitive reframing. Participants develop strategies to be more effective in their classrooms and more at peace in their lives.

**The Mysteries Program**
Shelley Kessler
The Crossroads School
1714 21st Street
Santa Monica, CA 90404
(Written requests only please.)
The Mysteries Program is a human-development curriculum for students aged 12-18. It integrates a broad variety of tools for expanding human capacities, preventing self-destructive behavior in youth, and facilitating a constructive adolescent “rite of passage.” It enables students to enhance their capacities for learning, self-expression, and celebrating human diversity. Workshops for teachers are available in several states. Also available are The Mysteries Sourcebook, a 300-page teacher’s guide, and “Honoring Young Voices,” a 50-minute video.

**CONFERENCES AND ORGANIZATIONS**

**Alliance for Alternatives in Healthcare**
22704 Ventura Boulevard, Suite 506
Woodland Hills, CA 91364
(818) 702-0888
An organization that seeks to enhance recognition of holistic, homeopathic, naturopathic, chiropractic, and acupuncture treatments and encourages health insurance systems to cover holistic, homeopathic, and naturopathic treatments in their policies. Membership includes holistic doctors, corporations, and individuals.

**American Holistic Health Association**
P.O. Box 17400
Anaheim, CA 92817
(714) 779-6152
A nonprofit, nonmembership educational organization that promotes a proactive holistic approach to health and health care. AHHA encourages individuals to make everyday choices that enhance their health. Among other resources, the Association provides, free of charge, an extensive list of organizations that offer referrals to a wide variety of health-care practitioners. All resource lists and educational materials are provided free of charge.

**Commonweal**
Michael Lerner, Ph.D., President
Rachel Naomi Remen, M.D., Medical Director
P.O. Box 316
Bolinas, CA 94924
(415) 868-2245
A health research institute that seeks to provide support and education programs for cancer patients and the health professionals who care for them. The Commonweal Cancer Help Program offers week-long retreats seven times a year for people who have cancer and members of their families or significant others. The retreats include yoga, progressive relaxation, meditation, imagery, massage, art, poetry, a vegetarian diet, and classes on making informed choices about conventional and complementary cancer therapies.

**Foundation for Advancement in Cancer Therapy**
Box 1242, Old Chelsea Station
New York, NY 10013
(212) 741-2790
A foundation that emphasizes nutrition, detoxification, and mind-body cohesion as therapies to control cancer. It asserts the right of the public to be informed of the "nontoxic biological" adjuncts and alternatives to surgery, chemotherapy, and radiotherapy and disseminates information about the efficacy of the therapies.

**Institute of Noetic Sciences**
475 Gate Five Road, Suite 300
Sausalito, CA 94965
(415) 331-5650
The Institute promotes education and research about the noetic sciences as well as the study of human consciousness. It seeks to broaden knowledge of the nature and abilities of the mind and consciousness and to apply that knowledge toward the enhancement of human well-being and the quality of life. It provides a network of communication and discourse between scientists and scholars and publishes a quarterly newsletter, a quarterly bulletin, and an annual guide to books and resources in the field of mind-body connections.

**National Chronic Pain Outreach Association**
7979 Old Georgetown Road, Suite 100
Bethesda, MD 20814
(301) 652-4948
An organization that disseminates information about chronic pain and its management in an effort to lessen the suffering caused by chronic pain. Operates information clearinghouse for pain sufferers, family members, and health-care professionals.

**Stress Reduction Clinic**
University of Massachusetts Medical Center
Jon Kabat-Zinn, Ph.D., Director
55 Lake Avenue
North Worcester, MA 01655
(508) 856-1616
The Stress Reduction Clinic provides instruction in Buddhist meditation to patients suffering from diverse medical problems such as chronic back pain, heart disease, and high blood pressure. The eight-week course helps patients regain control over their health by focusing their mind’s attention on the body.
A computer-assisted image of opiate receptors (Herkenham and Pert, Journal of Neuroscience, 1982) in a rhesus monkey brain. The neuropeptide, endorphin, acts on these receptors, which range from the highest density (shown here in red) to the lowest density (shown here in purple).
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