LIFE & HEALTH®

NATIONAL HEALTH JOURNAL MARCH, 1981 $1.25

PHOBICS–
PRISONERS
OF FEAR

YOUR FIRST
HEARING AID?
FOLLOW
INSTRUCTIONS

IF YOU HAVE
A BREAST LUMP...

Today, tomorrow...Worthington's always there with the products you need, the taste you want.

We know you want to serve your family wholesome, healthful meals that also taste very good. And you depend on Worthington Foods to provide the selection and variety you want. This has been our mission for over 40 years.

Just as before, we'll be introducing many new products this year and in the years ahead. Foods that are all completely meatless, rich in vegetable protein, and that fill even broader mealtime needs.

At Worthington, the search goes on to bring you the very best in taste, selection and good nutrition... today, tomorrow and for years to come.

Worthington Foods
Worthington, Ohio 43085

LIFE & HEALTH®

NATIONAL HEALTH JOURNAL
MARCH, 1981

Editor
JOYCE MC CLINTOCK, M.A.

Editorial Secretary
ELLA M. RYDZEWSKI

Art Director
BYRON STEELE

Designer
HOWARD BULLARD

Circulation Manager
R. S. SMITH

Marketing/Advertising
EDMUND M. PETERSON

Advertising Assistant
KAREN R. CRADDOCK

Consulting Editor
LEO VAN DOLSON, Ph.D., M.P.H.

Braille Editor
RICHARD KAISER

Medical Consultants
SAMUEL L. DE SHAY, M.D.
ALBERT S. WHITING, M.D.
H. L. MARTER, M.B., Ch.B.
RONALD M. NELSON, M.D.

Dental Health Consultants
ELDON E. CARMAN, D.D.S.
ELMER KELLN, D.D.S.

SDA Dietetic Association
Nutrition Consultant
ALICE G. MARSH, Sc.D., R.D.

97th Year of Publication
Volume 96, No. 3

Cover Photo by Tom Radcliffe

OBJECTIVE: LIFE & HEALTH, a family magazine, features significant health information to motivate readers to adopt sound principles of healthful living, as well as articles to enhance other facets of the reader's life. **MANUSCRIPTS:** LIFE & HEALTH gives consideration to unsolicited manuscripts, provided they meet certain requirements. Submissions can be up to seven double-spaced typewritten pages; brevity is encouraged. Articles should be health oriented, properly researched, scientifically documented, and written in an interesting style for nonprofessionals. Emphasis is on prevention. Only those articles accompanied by a self-addressed and stamped reply envelope are returned. **CONSUMER SAFETY:** An attempt is made to screen those products and services that are felt to be harmful, but the companies who advertise take actual responsibility for their products or services. **ADVERTISING:** LIFE & HEALTH accepts those advertisements that are compatible with the aims and objectives of the journal. Those wishing to advertise should submit advance data on copy and product to the Marketing and Advertising Department. **BRAILLE:** Selections are available in Braille. Write to LIFE & HEALTH, P.O. Box 6097, Lincoln, Nebraska 68506. **CHANGE OF ADDRESS:** Please use the change-of-address form in the Gazette section of this magazine. **SUBSCRIPTION PRICE:** U.S. currency: $12.95, one year. Single copy, $1.25. Prices may vary where national currencies differ. Prices subject to change without notice. **LIFE & HEALTH** (ISSN 0024-3035) is published monthly and copyrighted © 1981 by the Review and Herald Publishing Association, 6856 Eastern Avenue NW., Washington, D.C. 20012. (202) 723-3700. Second-class postage paid at Washington, D.C. Vol. 96, No. 3.

All rights reserved. Title registered in U.S. Patent Office. The owner is the General Conference of Seventh-day Adventists.

Page 5

Page 14

Page 10

Cilia: Sweeping Sentinels of Our Body's Airways 13
Thearon Staddon, M.S.

If You Have a Breast Lump . . . 19
Gail D. Haake
Some things you should know about fibrocystic disease.

A Move in the Right Direction: Earthquake Preparedness 21
Stephenie Slahor, Ph.D.

How You Can Help When There's a Death in Your Friend's Family 27
Dorice Knoll

HEALTH CARE:

When Your Child Goes Into the Hospital 4
Joanne C. Berger, R.N.
Some pointers on how parents can help their child feel more comfortable before and during hospitalization.

EXERCISE:

Walk Your Way to Fitness 7
James L. Fly

MENTAL HEALTH:

Phobics—Prisoners of Fear 10
Ella M. Rydzewski
Millions of persons suffering from phobias can now overcome them with the aid of specially structured programs.

GOLDEN YEARS

Your First Hearing Aid? Follow Instructions 14
Doris C. Crandall
Carefully reading and following the instructions that come with your new hearing aid can make a difference in its effectiveness.

FOOD AND NUTRITION:

Bananas—America's Favorite Fruit 16
Lydia Sonnenberg, M.A.

GAZETTE 23

BOOKSHELF 29

WHEN YOUR CHILD GOES INTO THE HOSPITAL

by Joanne C. Berger, R.N.

My daughter was just 2 years old when she had her first hospital admission. I panicked. All I could remember from my own days as a nurse were the things that upset children.

The surgeon allayed my fears by telling me that hospitalization can be a positive experience. He pointed out that "it can be an episode in the child's development, a part of growing up, to be without Mamma, to have to swing for oneself."

I've noticed that after her hospital stay, my daughter has developed a greater sense of independence with her family, her friends, and at school. The child learns from a hospital stay—and so do the parents. You can do several things to make the experience less traumatic for both of you.

More than half a million children each year are admitted to hospitals in the United States. It is best to be matter of fact about it when your child is one of them. This is not always easy. You do not see your own child as one of the statistics, and many fears can surface. Your own childhood fears, only vaguely remembered, loom large. It is often difficult to realize that when you were a child, parents were not allowed to visit, except for short, prescribed hours. Hospitalizations were usually much longer and more painful. But things have changed. Techniques have improved in every field from anesthesia to laboratory work.

More than half a million children each year are admitted to hospitals in the United States.

When you know in advance that your child will be admitted to the hospital, you can give him much preparatory instruction. If you find yourself too upset to calm your child, let another family member, a grandparent, or perhaps even a baby-sitter give the explanations. A child who prefers to discuss very little, however, should not be forced. Get a library book about going to the hospital and read it with your child. It is a good idea to get these hospital books before a hospital stay is anticipated. Emergency appendicitis or acute pneumonia leave little time for a full explanation, but previous reading will be remembered.

Find out ahead of time what the hospital visiting hours will be. They may range from the old-fashioned two hours, three times a week, to sleeping in the same room with the child overnight. Much argument and controversy rages at both ends of the spectrum.

Explain procedures ahead of time

At the time of admission, keep up a conversation with your child. You can ask the nurse any questions you may

Joanne C. Berger is a nurse, the mother of two children, and a free-lance writer. She lives in Braintree, Massachusetts.

PHOTO BY DONNA KANTOR CHILDREN'S HOSPITAL NATIONAL MEDICAL CENTER, WASHINGTON, D.C.

have, and she can quickly explain what is being done and why. Certain procedures are standard. You can discuss them briefly with your child. This will help him comprehend the hospital routine faster, thus allaying some fears.

An identification bracelet bearing the child's name is snapped on his wrist at the time of admission and stays there until it is cut off at home. Many people will look at it, and some will also ask the child his name, as another means of identification. Most pediatric nurses, however, quickly learn to know their young charges by name.

Tell the child that it will be necessary for you to give some information about him to a clerk, to the nurse, and perhaps to a strange doctor.

Sometimes, with a certain diagnosis, an X-ray will be taken. The camera (X-ray machine) may make a funny noise. The large negative that comes out is to help the doctor learn about the inside of the child. Often the child may look at the picture.

In the early phases of hospitalization, laboratory work is necessary. This usually involves a needle. The child can be told that it will hurt for just a minute and that he may cry if he wishes. Often when children are told they can cry, they decide not to bother. But the needle remains one of the most upsetting aspects of hospitalization for the parents.

All institutions need a urine sample for analysis. The nurse will ask you which words your child uses for body functions. The child may have to use a bedpan. In most instances, after the specimen is collected, the child will be allowed to use the bathroom.

Not all hospitals allow a child to use a regular bed, even if he has one at home. For safety's sake, cribs are preferred. Once children see others in these oversized cribs, they usually adapt peacefully.

Make your child's hospital stay comfortable

One thing children like to know is that they can have their own teddy bears or blankets or a few toys with them. Most hospitals have a playroom with a television set. No electrical appliances from home are allowed, because of the hospital's safety rules.

Your child might enjoy the adventure of packing a suitcase with his own toothbrush, comb, and other articles. He can bring his own bathrobe and slippers. Pajamas are optional, as hospitals have a plentiful supply. Most institutions require the patient to wear the 100-percent-cotton hospital garments to the operating and X-ray rooms, for safety reasons.

Different procedures and machines can be explained to the child as needed. "When you go to the operating room," you can explain, "you lie down on a stretcher with a belt, like a car seat belt, over your tummy. This way you won't fall off." My daughter could not wait to tell me the nurse called it a "wagon." Ask your surgeon whether the child will have bandages. If he will, explain that they are often large, not like band-aids at home.

Parents worry more about the food than does the child. Most children eat the hospital food quite willingly.

Parents worry more about the food than does the child. Hospitals have been in the business of feeding children for a long time and are aware of the likes and dislikes of various age groups. Most children eat the hospital food quite willingly, including special diets.

Mothers may ask themselves, How will I care for the child in the hospital as well as the children at home? Get help for the children at home. It is the ill child who needs you most. It's natural for a mother to go to the child with the greatest need of the moment. Although you are fatigued with worry, you will somehow find the energy you need. But try to remember that you, too, will need a few naps when the hospitalization is over. The ironing can wait.

Hospitalization disrupts family life. That need not be as negative as it appears. The children at home realize that the parents are caring for the sickest member, as they too would be cared for if the need arose. Often you will note how cooperative they are while you stay in the hospital with the recuperating child.

You do not have to be a nursing expert to care for your child. As his parent, you function as the main support for the child. The hospital staff is not a substitution or replacement for you, but rather a supplement to you. You would be better able to realize your worth if you could see the pediatric ward through the nurses' eyes. They know the extra problems of the children without parental support.

Honesty is important

Be honest with your child. If you are going to eat in the cafeteria and it will take half an hour, say so. If you are going home to cook dinner for the family and you will be gone a few hours, tell the truth. The child will appreciate your honesty. He will be better behaved, better able to control himself. To say you will be gone a few minutes and not return until the next day is a cruel lie that is torture for the child.

Your child will know you are worried about him. It is all right to tell him so, provided your worry is kept within reasonable bounds. Gushing your concerns to the child is of little value. Tell him calmly that you are concerned and are staying with him to help him get better. One side effect of this matter-of-fact approach is that it helps you to calm yourself as well.

One age group has a special problem all its own. The 2-year-old has what is referred to as a separation situation. He is not old enough to understand what appears to be the loss of a parent. It is difficult for this child to cope and sometimes difficult for you to handle the situation. The nurse will help you. Be honest. Don't "sneak out" for even a few minutes. The trauma that may result is far worse than the small effort of honesty.

Another problem that sometimes arises is that the child may regress—wet the bed or whine, for example—while in the hospital or when he returns home. The child must relearn the methods of supporting himself that you have taught him. Just go along with him gently; in most instances the regression passes in a few days.

If you and your child prepare for a hospital admission by discussing it beforehand, many fears will be removed. Furthermore, it has been proved that the child who understands what is going on will recuperate faster.

PHOTO BY TOM RADCLIFFE

WALK YOUR WAY TO FITNESS

Walking is shaping up as the exercise of the 1980s. It's the most versatile physical activity of all.

by James L. Fly

In a popular comedy film set in the 1964 summer Olympic Games at Tokyo, Japan, a young American athlete persistently evades answering the question of what sport he is there to compete in.

You don't find out until the last part of the film, when you see the young American and scores of other athletes hip-swiveling and arm-swinging their way through Tokyo's streets in the almost-comical stride of the long-distance racewalker.

Viewers could easily solve the young athlete's secret by the film's title, *Walk, Don't Run*, a slogan that millions of nonrunning Americans who haven't been swept into the jogging revolution and yet are concerned about fitness are adopting in the 1980s.

You might be surprised to learn that racewalking has been an official Olympic event since 1908. It also might be a revelation to you that brisk walking compares favorably with jogging as an aerobic exercise, one that improves your breathing capacity and circulation.

The young athlete in the film shouldn't have been embarrassed

James L. Fly is public information director at Walla Walla College in College Place, Washington. He also does some free-lance writing.

because he wasn't a runner or a swimmer, and you don't have to be intimidated by the sound of jogging shoes slapping the pavement outside your bedroom window at 6:00 A.M. As I write this article, Bill Rodgers, the incredible marathon man, has just led a record-breaking field of 14,000 runners for his third consecutive victory in the New York City Marathon. I wasn't among those intrepid road runners who huffed, puffed, and perspired 26 miles through the streets and across the bridges of the Big Apple. I admire them, but I don't envy them. I simply prefer walking. Maybe you do too. If you're a tortoise instead of a hare, this article is especially for you.

Even some of today's renowned runners recognize that their sport is not the sine qua non of fitness.

"Running is not for everyone," says Charles T. Kuntzleman, noted exercise consultant for the YMCA, and a runner for 25 years. "For some people it is too strenuous, too demanding. For some people it's a hassle. Many people take up running and soon stop. For all these ex-joggers and ex-runners, I submit that walking is the perfect exercise."[1]

The "guru" of running, Dr. George Sheehan, author of the best-selling *Running and Being*, says, "The walker can find his inner world no more than a short stroll from home. . . . The walker has found the peace that the runner still seeks."[2]

I guess that sums up my philosophy of exercise. To me, jogging seems to be a symptom of our accelerated society—trying to compress everything, including exercise, into the shortest time possible. Then, too, I have a suspicion that many people are taking up jogging not because they really want to, but because it is currently fashionable.

Now jogging *is* an excellent aerobic exercise, and I wouldn't want to deter anyone from it. It does have certain drawbacks, though, which I'll mention later. My purpose is to overcome the pervasive superstition that walking is inferior to jogging. As a matter of fact, walking has distinct advantages over jogging and other sports.

Advantages of walking

Walking is natural. We all know how to do it from the time we're around a year old. It doesn't require any superior talent or natural endowment, such as a supple body for gymnastics or a tall frame for basketball.

You don't have to go searching for a court, a rink, a chairlift, a pool, or a playing field. And you don't have to pay dues to join an exclusive club. Good exercise is as near as your front door.

Walking requires no special or expensive equipment, except a good pair of shoes. (Interestingly enough, *Consumer Reports* recommends a quality pair of running shoes as the best footgear for walking).[3] Other than that, you don't need a mitt, a racket, a ball, clubs, or skis—not even a crimson-colored warm-up suit with white racing stripes down the sides!

Of course, you do need warm clothes for crunching over icy streets in winter and rain gear for sloshing through spring puddles. But you probably own these items already, and that's just the point about walking. You can successfully incorporate it into your current life style without significantly disrupting it.

If you live near enough, why not walk to the store or to work? Besides getting good exercise, you'll keep your car's gas tank fuller for a little longer, which in these days of ever-increasing fuel prices, may mean real savings.

Brisk walking (three miles per hour) four days a week for at least forty minutes should keep you in good cardiovascular shape. A few years ago Fitness Expert Michael Pollock, coauthor of *Health and Fitness Through Physical Activity*, conducted detailed experiments comparing jogging and walking involving sixteen sedentary men aged 40 to 57 years. Dr. Pollock, who is the director of the cardiac rehabilitation program at the Mount Sinai Medical Center in Milwaukee, Wisconsin, wanted to find out whether walking could yield the same training effects as running if the duration and frequency of walking were increased.

The men in Dr. Pollock's experiment walked briskly for forty minutes, four days a week, over a period of twenty weeks. Their measured improvement was equal to that of similarly aged men jogging three days a week for thirty minutes.[4]

Brigham Young University researchers recently compared the calorie-burning efficiency of walking and jogging. They had twenty-four young men walk, then jog, on a treadmill. The result? By walking a mile in twelve minutes, they burned up only twenty-six less calories than when they ran a mile in eight and one half minutes.[5]

There is a big difference between jogging and walking, however, when you compare the pressure that each activity exerts upon the knees, ankles, and feet. Suspended in air for a split second between every step, the body slams down hundreds of pounds of pressure on the lower extremities during jogging. Many beginning joggers quit when they experience sore knees, pulled tendons, and aching ankles. Since the body is not suspended in walking, walkers subject their legs and feet to about the same stress as when they are standing.

Sore knees and pulled tendons pale beside the most serious potential side effect of jogging—sudden death from ventricular fibrillation, a fatal tremor of the heart brought about by too much stress put upon it.

In an interview in 1979 in *U.S. News and World Report* entitled "Is Jogging Really Good for You?" Dr. Meyer Friedman, a cardiologist at Mount Zion Hospital in San Francisco, reported that after studying the cases of sixty persons in San Francisco who died instantaneously, he determined that half of them were engaging in moderate to severe exercise, such as jogging, when they died. Autopsies showed that all of the victims had serious coronary artery disease, but it was learned that only half of them had been aware of it.[6]

The lesson is obvious. If you want to jog, or for that matter go on a strenuous hike in the mountains, be sure to visit your physician for a complete physical examination, including an electrocardiogram. If you do have heart problems, your doctor will probably advise you to begin a gradual exercise program by walking moderately. Generally speaking, if you're able to hold a conversation with someone while you're walking, you're not walking too fast. A moderate walk should be painless, and you should not be excessively tired afterward.

Benefits of walking

Walking is more than a physical exercise. It can enrich your life mentally, socially, and spiritually.

One day in 1973 a young man named Peter Jenkins, who was disillusioned by Vietnam, Watergate, racial strife, and his own personal identity crisis, decided that he would give himself and America one last chance. Accompanied by his half Alaskan

malamute, Cooper, Jenkins started from his small New York State college town on a walk across the country to see whether there was anything left to love.

There was.

It took him six years, but he did find himself, *and* a lovely wife, *and* scores of friendly Americans, ranging from a black family in the South who "adopted" him, to a Colorado rancher who, during long winter nights, spun tales of the Rockies. At a revival meeting in the South he found what he regarded as the most important discovery of all—a personal faith in God. His moving account of his epic journey was published in the April, 1977, and August, 1979, editions of the *National Geographic*. It is also a book now, called *A Walk Across America*.

Most of us aren't in a position to walk across the country when we feel oppressed by home and job frustrations and personal problems. What some of us don't realize, though, is that relief is only a 15-minute walk away. It's a lot more healthful than popping a tranquilizer, and a lot more satisfying. Take time for a walk. Gaze at a flaming sunset. Listen to the counterpoint chorus of birdsong. Breathe deep the earthy spice of a park or forest. Breaking away from our routines and getting in touch with nature helps us to get back in tune with ourselves and with others.

In fact, I believe that walking can even bring families closer together. "Daddy, can we take a walk?" is one of the most frequently asked questions of our 3-year-old son, Eric, in the evenings when I get home from work. My wife and I rarely say No.

After supper we go out, and taking one step to his three, we hold hands and stroll down the street toward the playground, where we become kids with Eric and slide, swing, teeter-totter, and merry-go-round for an hour. On the way home, at Eric's insistence because he is "tired," I carry him in my arms. Holding a wriggling, chattering monkey would be an easier burden.

"Daddy, there's the house where the white kitty lives! Mommy, can I throw a rock in that puddle?" he exclaims with an endless barrage of exuberant conversation.

I doubt that my red-haired son with the sparkling blue eyes would be as responsive and observant if we sat around watching television all the time. Marriage and family counselors keep telling us today that a lack of communication is the main reason for our high divorce rate and wide generation gap. In an age of fiber optics, home computers, and giant-screen television, people have forgotten the art of personal, heart-to-heart conversation. I like to believe that the family who walks together, talks together.

Someday, when Eric and his younger brother, Ryan, are a little older, Nancy and I plan to take them backpacking into the mountains. America is a peripatetic playground for the pedestrian. Nearly every State has hundreds of miles of hiking trails in all kinds of terrain. Some towns and cities have nature paths and historical walking tours. You can get trail maps and information from the U.S. Forest Service, the National Park Service, local chambers of commerce, convention and visitors' bureaus, and hiking clubs. Books and magazines on hiking and backpacking available at bookstores and libraries have much of this information, as well as details on the equipment and techniques you'll need for special walking situations.

The beauty of walking is its simplicity and adaptability to people of all fitness levels, ages, and interests. You can combine walking with other hobbies and avocations such as photography, rock collecting, birdwatching, and writing. Writing? Indeed. The English writer Robert Louis Stevenson was an avid walker. So was the American philosopher Henry David Thoreau. You remember Thoreau—he was the one who marched to a different drummer. Some of Thoreau's most profound insights came when he was hiking through the Massachusetts woodlands.

I have an 85-year-old uncle in California who is a retired Methodist minister. He has an amazing memory. He has never preached a sermon using notes and can quote entire passages of the Bible, plus hundreds of famous poems. He attributes his good health and sharp mind to his daily walks.

At a three-day conference on Exercising and Aging—Its Role in the Prevention of Physical Decline, held at Bethesda, Maryland, in 1978, researchers from the United States, Canada, and Western Europe concluded that walking is the most efficient form of exercise and the only one we can safely follow all the years of our lives.[7]

C. Carson Conrad, executive director of the President's Physical Fitness Program, predicts, "Within the next three years we expect that walking will become the 'in' thing that jogging is today."[8]

So whatever your walk *of* life, get out there and walk *for* life!

BOOKS ABOUT WALKING

The Complete Book of Walking, Raymond Dreyfack, 1979. Farnsworth Publishing Company, 78 Randall Avenue, Rockville Centre, New York 11570.

The Complete Book of Walking, Charles T. Kuntzleman and the editors of *Consumer Guide*, 1980. Simon and Schuster Publishers, 1230 Avenue of the Americas, New York, New York 10020.

The Doctor's Walking Book, Fred A. Stutman, M.D., 1980. Ballantine Books, 400 Hahn Road, Westminster, Maryland 21157.

The Gentle Art of Walking, A compilation from the *New York Times*, edited by George D. Trent, 1971. Arno Press, 3 Park Avenue, New York, New York 10016.

The New Complete Walker, Colin Fletcher, 1974. Alfred A. Knopf, Inc., 201 E. 50th Street, New York, New York 10022.

A Walk Across America, Peter Jenkins, 1979. William Morrow & Company, Inc., 105 Madison Avenue, New York, New York 10016.

Walk Don't Run! Simon J. Wikler, 1980. Windward Publishing, Inc., P.O. Box 371005, Miami, Florida 33137.

Walk! It Could Change Your Life, John Man, 1979. Paddington Press, Ltd., 95 Madison Avenue, New York, New York 10016.

Walking! John T. Davis, 1979. Andrews and McMeel, Inc., 4400 Johnson Drive, Fairway, Kansas 66205.

REFERENCES

[1] Charles T. Kuntzleman and the editors of *Consumer Guide*, *The Complete Book of Walking* (New York: Simon and Schuster, 1979), p. 7.

[2] George Sheehan, M.D., *Dr. Sheehan on Running* (Mountain View, California: World Publications, 1975), pp. 52, 53.

[3] Kuntzleman, *op. cit.*, p. 109.

[4] Michael L. Pollock, Jack H. Wilmore, and Samuel M. Foxx III, *Health and Fitness Through Physical Activity* (New York: John Wiley and Sons, 1978).

[5] *Executive Fitness Newsletter* (Rodale Press), April 21, 1979.

[6] "Is Jogging Really Good for You?" Interviews with Drs. David Brody and Meyer Friedman, *U.S. News & World Report*, March 19, 1979, p. 55.

[7] Kuntzleman, *op. cit.*, p. 83.

[8] Raymond Dreyfack, *The Complete Book of Walking* (Rockville Centre, New York: Farnsworth Publishing Company, 1979), cited in foreword by Dr. Joseph P. Bertucci.

PHOBICS-
Prisoners of Fear

by Ella M. Rydzewski

The day began like any other June day in southern California—sunny and dry—with a slight haze on the horizon, which Carol Bryant (not her real name) could see from her third-story office window. As the hours went by, the haze seemed to worsen, reflecting the vague cloud hanging over her spirits. She had been experiencing some stressful times in the past several months and always seemed to feel tired and apprehensive. She was glad when five o'clock came, and she could leave work.

On the way home, Carol stopped at a grocery store. As she passed through the swinging glass doors, her uneasiness grew. She found herself hurriedly throwing needed items into the shopping cart—she didn't even bother to get everything she wanted. She just acted on the urge to finish her shopping and get out of the store. When she got into a checkout line, it turned out to be the slowest one. As the moments went by, her dread began to build in momentum, until, to her astonishment, it reached a point of stark terror that washed over her body like a gigantic wave. In its wake she began to tremble and feel dizzy. She thought, I am going to pass out. Trying not to let anyone notice her plight, she carefully got out of line, left the cart in one of the aisles, and fled from the store. By the time Carol reached her car, the panic spell had subsided, but she never again returned to that store.

Carol experienced more panics, and

Ella M. Rydzewski is editorial secretary for Life & Health.

PHOTO BY BUDD GRAY

A fear of elevators is a phobia that is experienced by many people. Here Therapist Jerilyn Ross (on the right), of the Phobia Program of Washington, accompanies Carol Mitchell as she practices confronting her phobia.

every time this happened, she thereafter avoided the places where they had occurred. Her world narrowed, until eventually she was going only to and from work. Her family did not know that anything was wrong—she always had an excuse for not leaving the house.

Carol is one of millions of Americans who suffer from phobias. Her particular problem, known as agoraphobia (fear of being in public places or open spaces, away from a person's place of security), is probably the most crippling, because many of its victims react to the symptoms by drastically limiting their activities. Statistics show that about 10 million Americans have phobic fears, and 1 to 2 million have them to the extent that their lives are severely limited. Most of these people do not even know the name of their problem, and fewer still know that treatment is now available to help them overcome it. Recent publicity has attempted to spread the message that help exists, that they are not alone, and that they are not mentally ill.

In past years the sufferers of agoraphobia, and other phobias, have felt isolated, experiencing humiliation, guilt, and frustration when others do not understand. Many of them carefully hide their conditions.

The Phobia Program of Washington, located in Rockville, Maryland, says that "in general, phobic fears have two parts. The most dramatic is the panic attack" of terror when the phobic flees to a safe place. The second fear is anticipatory—the fear of the panic and not knowing when or where it will occur.[1] It is this second fear that must be overcome, because it is so confining (some phobics will not even leave their homes) and it erodes relationships and causes distress.

Unfortunately, very little attention has been given to this condition in medical schools or even in psychiatric residencies. Physicians generally have not known how to treat phobics. Even psychiatrists have not been familiar enough with the condition as a separate entity to deal with it effectively.[2] Although psychoanalysis may be beneficial for other personal problems, it is of little benefit for the phobic. Physicians usually prescribe medication to treat the accompanying depression (wouldn't you be depressed if you couldn't leave your house?). Although little has been known about phobias and their treatments, now that the phobic condition is being separated from other emotional problems and not seen as a mental illness, programs are being developed to help its victims break out of their prisons of fear.

When should the phobic seek help?

Everyone has fears. However, when a fear becomes so overwhelming that it causes a person to avoid certain situations or places that are important to living, then the fear has become a handicap. If the serious fear has not gone away in a few months, then it is time to seek help. Even if one continues to, or must, confront the phobic situation but suffers intolerable mental pain, then treatment should be considered.[3]

About 10 million Americans have phobic fears, and 1 to 2 million have them to the extent that their lives are severely limited.

An example of the latter is an airline stewardess who suddenly became fearful of flying but was still forced to fly because of her work. Almost daily she suffered severe mental anguish on her job until she went through a phobia program.

The phobic personality

According to Robert DuPont, M.D., founder of the Phobia Program of Washington, phobics tend to be "very intelligent, hard-working, creative, motivated people."[4] They are often found in occupations that are creative, such as painting, writing, or musical professions. The phobic is basically an "excitable personality"—one who is sensitive and responds more strongly than others to certain stimuli. The moods of those with whom he associates easily pass on to him. It is understandable, therefore, that phobias often run in families. (The strong possibility also exists that the tendency is inherited.)[5]

Another characteristic personality trait of the phobic is that he tends to want to please everyone, often at the expense of his own comfort. The phobic tends to dislike discord. He is often self-conscious and lacks assertiveness when it is needed, although his usual compliant behavior may give way to anger when he reaches a certain point of long-held-in irritation or a sensitive topic is introduced.

According to studies done by TERRAP (Territorial Apprehension), an organization that works with phobics, "inhibition is one of the key issues in agoraphobia." Criticism is a powerful inhibitor of free expression of feelings and/or can be guilt-producing. Criticism seems to be a "consistent factor in the origin of agoraphobia. Usually, a family member has an exaggerated need to exercise critical judgment of others. Slowly and often imperceptibly the ever-present critical attitude elicits in the responsive individual a fear of doing anything that may directly or indirectly result in criticism, and the tendency to please at all cost develops."[6] Phobics, having a tendency toward perfectionism, can often be their own inhibitors.

The excitable personality is quick to laugh or cry and has the capacity for very deep emotions. However, he may attempt to control these emotions because of what others may think. The phobic personality can get deeply involved in plays, stories, music, or even religious experiences, because he feels very deeply. If, then, a person with a more than average tendency to have feelings aroused has some family history of anxiety, and has in his life an inhibitor—either himself or someone close to him—the stage is set for phobias to develop.

A phobia can be triggered by emotional trauma that is later unconsciously associated with a special situation. An example might be a child bitten by a dog, who becomes phobic around dogs—even toy dogs. This even can be passed down to the next generation. In one family the mother had become frightened by a cat, and she passed her fear of cats on to her daughter, who also became so frightened of them that she could not even bear to watch a cat on the television screen.

The phobic becomes sensitized or, we might say, conditioned to be afraid of some object, animal, or situation. Therapy, then, must consist in decreasing the sensitivity. This is done by gradual exposure to the feared thing, to increase the phobic's tolerance to feelings and helping him to learn how to decrease his levels of anxiety and cope with normal levels of fear.

Studies reveal another interesting fact about phobics—approximately 74 percent of its victims are women. Onset is usually in the young adult years for both sexes.[7]

Methods of treatment

In 1962 Dr. Arthur B. Hardy, a psychiatrist in Palo Alto, California, was working with the Mental Research Institute there. At this time a man came to the institute claiming to have cured himself of what he called "territorial apprehension"—a fear of being too far from a safe place. He also claimed to have cured the brother of a friend who had been pronounced incurable and was in a veteran's administration hospital. In five days, he said, the man was released and had a job.

Dr. Hardy checked out these claims and decided to try the man's methods on a patient who had been housebound for seven years. Each day Dr. Hardy and the man worked with this woman, a step at a time, helping her to face her fear. First they took her to the door, then out on the porch, next down the walk, finally out onto the sidewalk. Soon she was no longer limited in her activity and had overcome her fear.[8]

Not long after this, Dr. Hardy founded TERRAP, a self-help organization that uses former phobics to help other phobics. After an article appeared in a local paper, the new organization received six hundred calls in one day. Therapy includes group meetings plus field practice. In summary, the TERRAP program works as follows:

1. A stimuli that touches off the anxiety is pinpointed.
2. Anxiety levels are designated as 0 to 10.
3. People practice confronting their fears, at first with a therapist. This is done gradually, a step at a time.
4. Phobics learn to identify feelings rather than deny them.
5. They develop coping skills and assertiveness.
6. They learn how to socialize and to help others.
7. They learn how to think about things differently. (They are often negative thinkers, exaggerating situations, and imagining potential catastrophes [i.e., headaches may be seen as possible symptoms of a brain tumor].)
8. They learn how to express feelings appropriately, and not drive others away.
9. They learn relaxation techniques and how to cope with anxiety.

Dr. Pat Norris, of the Biofeedback Voluntary Control Department of the Menninger Foundation, reports success with the use of biofeedback in desensitizing persons with phobias. A phobic is responding to a negative image, and with the use of biofeedback he can learn to relax. At the Menninger Foundation the phobic is worked with on a one-to-one basis. First he learns general control with the use of a portable biofeedback unit that measures vascular constriction (temperature of the hands) and galvanic skin response. The individual learns that he has the power to control his physiology, and therefore, that it is possible to control the frightening fear symptoms. The phobic is taken, one step at a time, in imagination through a phobic situation. Finally he will confront the actual situation, either on his own or with a therapist.

Biofeedback skills are learned by practicing ten to fifteen minutes twice a day. Stress management techniques such as deep breathing and muscle relaxation are also part of this program. Phobias are only one of many problems being treated with biofeedback at Menninger, and Dr. Norris reports that each phobic treated has shown improvement.[9]

"As far as I am concerned, there is no drug that is going to cure agoraphobia."

When asked whether religion helps in this kind of problem, Dr. Hardy noted that, unfortunately, too many phobics have difficulty in understanding the principles of religion. They may see their religion as negative, overly strict, and critical; therefore, it sometimes is not helpful but instead produces guilt. Dr. Hardy believes that religion helps the person who can truly believe and practice it—"It will give you the confidence [trust] to try something, and you will improve."

Therapist Virginia Dodge, of the Washington Phobia Clinic, has received training in pastoral counseling in addition to her phobia work. As a former phobic she can attest to the value of her faith. "I would turn to prayer in times of anxiety," she said. "This always got me through. I also found it helpful to repeat comforting Bible texts."[10]

Are drugs beneficial in treating phobics? Dr. Hardy has noted that studies done with patients treated with drugs show an 85 percent improvement rate; without the drugs patients have an 80 percent improvement rate. "What happens, though, is that as soon as they withdraw the drugs, the 85 percent drops to about 70 percent. As far as I am concerned, there is no drug that is going to cure agoraphobia."[11]

The treatment of phobias is still a pioneering effort, and a lot more needs to be learned. Many more treatment centers are being developed throughout the country as this problem is becoming recognized. In the Phobia Program of Washington, each person is given a card to carry to remind him of the "Six Points of Contextual Therapy for Phobias":

1. Expect and allow fear to arise, and accept that you have a phobia.
2. When fear appears, wait and let it be.
3. Label the fear level 0 to 10 and watch it go up and down.
4. Focus on and do manageable things in the present. [You might recite a poem or Bible text, or count back from 100 by 3's.]
5. Function with a level of fear and appreciate your achievement.
6. Expect and allow the fear to reappear. [It cannot harm you.]

There are different types of phobics—the mild, the moderate, and the severe. In many cases, years have been wasted as an individual's life has revolved around his phobia—stealing not only time but joy. Now there is hope for such individuals, that they finally can become free from their prisons of fear. ❦

For further information write TERRAP, Inc., 1010 Doyle Drive, Menlo Park, California 94025.

REFERENCES

1 "The Phobia Program of Washington," Feb. 1, 1980, mimeographed, p. 1.
2 *Ibid.*
3 Arthur B. Hardy, M.D., *Agoraphobia, Symptoms, Causes, Treatment.* Menlo Park, California: TERRAP, Inc., 1976, p. 17.
4 Robert L. DuPont, personal conversation.
5 Arthur B. Hardy, M.D., personal correspondence.
6 Hardy, *Agoraphobia, Symptoms, Causes, Treatment,* p. 23.
7 Hardy, correspondence.
8 *Ibid.*
9 Dr. Pat Norris, Menninger Foundation, personal conversation.
10 Virginia Dodge, M.S., personal conversation.
11 Hardy, correspondence.

Cilia cannot stand up against tobacco smoke—after prolonged punishment from the noxious fumes they die.

Cilia: Sweeping Sentinels of Our Body's Airways

by Thearon Staddon, M.S.

Remember the last time you were up in the attic looking for something in that old trunk? Or when you cleaned out the garage? Did you notice those tiny motes of dust floating in a patch of sunlight streaming through the window?

As a boy I tried to avoid the sunlight when playing in the old chicken coop because I didn't want to breathe that dust! But, of course, the dust floats in the shadows as well as in the sunlight—you just don't see it.

Imagine what condition we would be in if all the dust we breathe actually stayed in our lungs. How does the body guard itself against all those particles?

Lining the nasal passages, the trachea, and the major airways of the lungs are uncounted millions of ciliate epithelial cells coated with mucus.

Epithelial cells are the type of cells that cover all the surfaces in or on the body. The outside surface of the epithelial cells that line the passageway between the outdoors and our lungs is covered by cilia, microscopic hairlike projections that protrude out into the airway.[1] These cilia beat back and forth, similar to the movement of oars.[2] If you added the distance that the tip of a cilium moves with each stroke, you'd find that it travels about a mile each week,[3] with as many as 1,500 strokes each minute.[4]

The lungs consist primarily of almost microscopic air pockets called alveoli, and a system of sheetlike spaces in the walls of these alveoli through which blood flows.[5] The alveoli work something like a train depot does, and the blood that flows by can be thought of as trains. The carbon dioxide that the body produces in the process of living unloads at the depot and is exhaled. The oxygen we have inhaled is loaded into the train to be taken to all parts of the body.

When we inhale, the air swirls through a baffle system in the nose, called the turbinates, then on down through the trachea and into the lungs. Only the very smallest particles remain suspended in the air all the way to the alveoli. Most of the larger particles come in contact with the sticky mucus lining the turbinates or the passageway from the back of the nose down through the neck. The particles are captured on that mucus just like flies are on flypaper. Just below the level of our shoulders, where the airway divides into many, many successively smaller branches, the airflow is sharply reduced, because of the increased total cross-sectional area of the airway. At this point nearly all of the remaining intermediate to small particles settle out of the air and are trapped in that sticky mucus.

Now that the mucus has trapped the particulate pollution we have inhaled, the cilia play their extremely important role in protecting our lungs. With their oarlike movements, the cilia push that thin sheet of mucus toward the back of the mouth (the pharynx), where the mucus with its load of dust is either spat out or swallowed.[6] While the epithelial cells keep secreting new mucus, the old, dust-laden mucus is moved along down and out of the back of the nose, as well as up from the top part of the lungs and lower trachea, to the pharynx at an average rate of one centimeter (about two-fifths of an inch) per day.[7]

In an era of a heavily polluted atmosphere, we can be grateful that those cilia keep moving that escalator of mucus with its load of irritants up, out, and away. With never a vacation, those persevering cilia keep beating, beating, beating.

A number of studies have shown, however, that cilia cannot stand up against tobacco smoke.[8,9,10] Their motion stops with exposure to such smoke, and after prolonged punishment from the noxious fumes they die.

Without our cilia, we'd be in a sorry fix. Those marvelous gas-exchange organs—the lungs—by and by would become little more than sodden bags full of mud. Therefore, we should not impose a greater burden than necessary on our cilia—those faithful sweeping sentinels of our airways. ❦

Thearon Staddon is pastor of the Palmer, Alaska, Seventh-day Adventist church. He holds a Master's degree in nutrition and is a candidate for the Master of Science degree in physiology from Loma Linda University in California.

REFERENCES

[1] R. Eckert, *Animal Physiology* (San Francisco: W. H. Freeman and Company, 1978).

[2] P. Satir, "How Cilia Move," *Scientific American*, 231 (4), October, 1974, pp. 45-52.

[3] J. Gray, "The Mechanism of Ciliary Movement," *American Naturalist*, 63, 1929, pp. 68-81.

[4] T. Dalhamn, "A Method for Determination in Vivo of the Rate of Ciliary Beat and Mucus Flow in the Trachea," *Acta Physiologica Scandinavica*, 33, 1955, pp. 1-5.

[5] A. C. Guyton, *Textbook of Medical Physiology* (Philadelphia: W. B. Saunders Company, 1976).

[6] A. D. Hilding, "On Cigarette Smoking, Bronchial Carcinoma and Ciliary Action, IV. Ciliary Streaming Through the Larynx and Distribution of Laryngial Epithelium," *Annals of Otology, Rhinology, and Laryngology*, 65, 1956, pp. 116-130.

[7] D. Proctor, "Physiology of the Upper Airway," *Handbook of Physiology, Section 3: Respiration*, vol. 1, American Physiological Society, 1964 (Baltimore: Williams and Wilkins Company).

[8] J. J. Ballenger, "Cigarette Smoke and Respiratory Cilia," *New England Journal of Medicine*, 263, 1960, pp. 832-835.

[9] T. Dalhamn, "The Effect of Cigarette Smoke on Ciliary Activity in the Upper Respiratory Tract," *Archives of Otolaryngology*, 70, 1959, pp. 166-168.

[10] A. C. Hilding, "Cigarette Smoking, Bronchial Carcinoma and Ciliary Action, III. Accumulation of Cigarette Tar Upon Artificially Produced Deciliated Island in the Respiratory Epithelium," *Annals of Otology, Rhinology, and Laryngology*, 65, 1956, pp. 116-130.

Your First HEARING AID? Follow Instructions

A hearing aid is not a cure for hearing impairment, but, in most cases, it can help if it is fitted properly and used correctly.

by Doris C. Crandall

Who says instructions are for following? Harry C. says so. And who is Harry C.? He is an ordinary citizen, much like the man next door. Like the average American, Harry didn't read the instructions on how to operate and care for his television, his lawn mower, or the kitchen and laundry appliances he bought for his home. When he became partially deaf and purchased a hearing aid he made the same mistake. Fortunately, Harry eventually learned—although the hard way—to read and follow directions concerning his hearing aid, or he might have become a miserable recluse.

Harry paid $350 for his hearing aid, and sixteen hours later he put it into the drawer of his bedside table and left it there. Even as he closed the drawer, he remembered the hearing-aid specialist's saying that at night he should keep the aid in an airtight plastic bowl with some silica gel to draw out the day's accumulation of moisture.

Harry rubbed his aching head. "It doesn't work," he mumbled to his wife, Edie. "I still can't hear, and I feel positively ill."

The truth is that Harry was ill. Wearing his first hearing aid nonstop for sixteen hours without a practice-and-adjustment period had made him nervous, irritable, and tired. As to the cost of the aid, Harry thought he'd been had.

Doris C. Crandall has had a hearing loss for eighteen years and has worn a hearing aid for the past six years. Mrs. Crandall, who lives in Amarillo, Texas, has written a number of articles that have appeared in magazines and newspapers.

Harry did everything a first-time hearing-aid user should not do.

Many people believe, as Harry did, that a hearing instrument is a cure for a hearing impairment. It isn't. It can be compared to eyeglasses—they won't cure poor eyesight. When glasses or a hearing aid are removed, the problem is still there. However, like glasses, an aid can help in most cases if it is fitted properly and used correctly.

Dr. Aram Glorig, associate director of research for the Ear Research Institute in Los Angeles, California, says, "Buying a hearing aid is hardly the beginning in the procedure to make use of amplification. Most cases, especially those with sensorineural (inner ear) hearing loss, require, first, a good hearing aid evaluation and, second, a period of wearing to reattune the brain to hear the sounds that it has not processed for years." *

Certainly Harry did some things right. Most important, he recognized he had a hearing problem. He noticed he could no longer hear rain falling on the housetop, and that people often startled him because he didn't hear their approaching footsteps. Edie complained that he turned the TV up abnormally high. So Harry saw an otologist and then an audiologist. The audiologist evaluated his hearing disorder and sent him to a hearing-aid specialist. The specialist fitted Harry with a hearing aid custom made for his particular loss, explained the use of the instrument, and gave him several booklets of instructions. He even told Harry to be sure to read them.

All the wrong things

From then on Harry did everything a first-time hearing-aid user should not do. He stuck the pamphlets into his suit coat pocket and forgot about them. At home he put on his aid and asked Edie to help him find out whether it was worth its "salt." He adjusted the volume to what he thought was a comfortable level and said, "Edie, go into the bedroom, shut the door, and say something." Edie did so, but Harry couldn't hear her. He turned the volume up until the aid whistled, but he still couldn't hear Edie. Then he sent her into the back yard to try the same experiment.

"Now can you hear me, Harry?" Edie called. He couldn't. Harry continued the tests. To create background noise he turned on the TV, the washer, and the dryer simultaneously and tried to distinguish Edie's words. He invited three neighbors over to talk, but he couldn't make out half of what they said. All day long he adjusted the hearing-aid volume up and down to accommodate different situations. The result was that he was glad to be rid of it at bedtime.

The results would have been quite

different if Harry had read and followed the instructions given in the booklets he stuck into his pocket. He would have learned that a first-time hearing-aid user needs a practice-and-adjustment period. Also, he'd have known to practice listening to forgotten sounds in the familiarity of his home with the volume of his aid adjusted to a comfortable level.

Have you ever met someone whom you haven't seen for a long time, and you are positive you know him, but you can't at the moment recall his name? It's the same with disremembered sounds. After you hear them several times you won't have any difficulty recognizing them.

If the aid tires the user, he should turn it off, rest awhile, and then practice again. Most of all, he should be patient and should not expect too much too soon.

Relearning to hear takes practice

Furthermore, he should wear his hearing aid a little longer each day, until he is at ease wearing it from the time he arises in the morning until he goes to bed at night. At first he must try talking with only one person at a distance of six to eight feet; this span is the correct range for a hearing aid. He must converse in normal conversational tones. He must ask the person with whom he talks to look directly at him and avoid holding a hand in front of his mouth or turning his face away while speaking. The aid user's hearing won't suddenly become perfect, but it will improve with practice.

PHOTO BY BETTER HEARING INSTITUTE, WASHINGTON, D.C.

Also the aid user should practice listening to the radio and television. He may find that he has to sit closer than do other people—up to 75 percent closer, because announcers and performers talk rapidly and sometimes indistinctly. Words and sounds that are broadcast are mechanical reproductions, not natural tones. Here again, regular listening is the key to better understanding.

So the main point in relearning to hear is continuous practice. There are no short cuts. Above all, the user should not be discouraged. He should not give up. The longer he puts off using his hearing aid regularly, the more time it will take to achieve better hearing.

Harry C.'s story ends happily, because a month after getting his aid, he took his coat to the cleaners and found the pamphlets in the pocket. He decided to read them, and then he followed the instructions step by step. Now he has relearned how to hear. He joins in conversations and takes an active part in his community. Of course, he still can't hear Edie speak from another room or from the back yard, but he now knows that it was unrealistic to expect that kind of performance from a hearing aid.

The main point in relearning to hear is continuous practice. There are no short cuts.

Harry has his aid checked regularly at the hearing-aid specialist's office—another helpful hint he learned by reading the booklets. At night he keeps his aid sealed up with some silica gel in one of Edie's Tupperware bowls, because he knows that moisture is an aid's worst enemy.

"Read and follow instructions," Harry says, "because sometimes it's a matter of to hear or not to hear, and, friend, that's *some* great difference."

REFERENCE

* Aram Glorig, M.D., Associate Director of Research, Ear Research Institute, Los Angeles, California, in a letter to the author.

Buy some, Mommy!" Upon spying the banana counter, how many little children have made this request while tagging along as their mothers shop? Bananas have always been a favorite fruit of children. But their appeal is not limited to the young, nor to any country, for bananas are widely available throughout the world. In many parts of the tropics they are as important in the diet as grains or potatoes are in temperate climates.

Not only are bananas extensively cultivated and marketed, but they have a long and fascinating history.* The banana was referred to in ancient Hindu, Chinese, Greek, and Roman literature. The earliest records of banana cultivation are found in India. From there Arabs obtained the fruit and probably introduced it into the Holy Land and northern Egypt. When trade flourished across the Indian Ocean in the early centuries, the banana was established on the east coast of Africa, and it is believed that the Arabs gradually carried the fruit from tribe to tribe across equatorial Africa. The Portuguese took bananas to the Canary Islands, and eventually the fruit was transported across the Atlantic Ocean.

Credit for introducing this valuable fruit to the New World belongs to Friar Tomas de Berlanga. He came as a missionary to the island of Santo Domingo in 1516, only a few years after Columbus discovered America, bringing with him a few banana roots from the Canaries. Other missionaries in the New World followed his example, for records show that when the location of a mission had been chosen, one of the first projects was planting bananas and plantains so that there would be plenty of food.

The banana family consists of about one hundred varieties and is grown in practically all of the moist tropical countries and islands. Large quantities for export are grown in Central and South America and the West Indies.

Bananas are plentiful the year round, and Americans eat more bananas than any other single fresh fruit.

Unlike some other fruits, bananas do not ripen satisfactorily on the plant and are harvested green and ripened under controlled conditions. This means that this fruit can be made available in far-off places.

Generally speaking, a good banana should be plump, unblemished, firm, and bright in appearance. A greenish banana may be as nutritious as a fully yellow one, but it is not yet at the eating stage. Bananas should be ripened at room temperature.

In the unripe banana the carbohydrate is present in the form of starch, but during the ripening process this

---

Lydia Sonnenberg is associate professor of nutrition in the School of Health, Loma Linda University, Loma Linda, California. Possessing more than theoretical knowledge, she was for sixteen years director of dietary services on the university campus. No novice at writing and no stranger to LIFE & HEALTH, she wrote the dietitian's page of this magazine for five years.

BANANAS—AMERICA'S FAVORITE FRUIT

by Lydia Sonnenberg, M.A.

PHOTOS BY HAROLD M. LAMBERT STUDIOS

starch is converted into sugar. When the banana is thoroughly ripe, the carbohydrate consists almost entirely of fruit sugar. A part of this sugar is quickly absorbed and available as food energy, while the remainder is absorbed somewhat more slowly, providing energy over a period of time.

Bananas may be used in the diet either as fruit or vegetable. When partially ripe, bananas are quite similar to the potato in composition and can be used in cooked form. The fresh fruit in the fully ripe state is easily digested.

What is a banana, nutritionally speaking? The ripe banana is about three-fourths water and one-fifth sugar. The remaining fraction consists of small amounts of starch, protein, fat fiber, pectins, minerals, and vitamins. Bananas contain a good assortment of many nutrients but are not especially rich sources of any one nutrient, with the exception of potassium. This mineral, like many others, is essential for health. It is found in the fluid within the body cells and has some very important roles to fill in body function.

Easily digested

Because bananas are a good source of energy and are easily digested, they fit particularly well into the food patterns of infants and the elderly. They can be used to advantage in a number of therapeutic diets: restricted salt (sodium) diets, because bananas are very low in sodium; in low-fat diets, since bananas, contrary to what many think, are virtually fat-free; in modified ulcer diets, because of their smooth texture; in low cholesterol diets, since bananas, as all plant foods, do not contain cholesterol; and in reducing diets, since bananas have a modest calorie content, excellent satiety, and flavor satisfaction.

Although bananas are usually eaten raw, which ensures the retention of all the nutrients present, try them occasionally in cooked form. Plantains, a cooking variety, are generally not found in United States markets; however, locally available bananas can be used if slightly green-tipped fruit is selected.

To bake bananas, peel and arrange them in a shallow buttered baking dish. Brush with melted margarine and sprinkle lightly with salt. Bake in a moderate oven (375°) 15 to 18 minutes until bananas are tender and easily pierced with a fork. Serve whole or cut crosswise into halves or quarters. Serve hot as a vegetable or as a dessert. To broil, simply arrange bananas brushed with margarine on broiler rack. Broil six to ten minutes or until they are brown and tender. With a dollop of sour cream they make an especially good dessert.

If your family finds itself in a breakfast rut, make this surprise treat: cook any hot cereal, preferably whole grain, by following the directions on the package. After the cereal is cooked, remove it from the heat and allow to stand a few minutes. Add mashed bananas, about ¼ cup per serving, and a few chopped nuts. This breakfast, with some citrus fruit and milk or soya milk, makes an appetizing and nutritious meal.

For your fruit salad, add mashed bananas to the dressing. The acid of the lemon or pineapple juice in the dressing will keep the bananas from turning dark.

Bananas combine with many fruits, and only your ingenuity is the limit to what you can create in a salad or dessert that is sure to please. Use dried fruits, such as sliced figs, as well as fresh fruits in a salad.

Nutritional Value of 1 Small Banana, Raw

Calories	85		Potassium	370.0	mg.
Protein	1.1	gm.	Sodium	1.0	mg.
Fat	0.2	gm.	Vitamin A	190	I.U.
Carbohydrate	22.2	gm.	Thiamin	0.05	mg.
Calcium	0.008	mg.	Riboflavin	0.06	mg.
Iron	0.7	mg.	Niacin	0.7	mg.
Phosphorus	0.026	gm.	Ascorbic acid	10.0	mg.

RECIPES

Banana Milkshake

1 cup cold milk
1 medium-sized ripe banana

1. Peel the banana and mash it with a fork.
2. Shake or beat in blender the mashed banana and milk until smooth and creamy.
3. Serve immediately.

Yield: One serving

Variations: Add 1 tablespoon flavored malted milk powder or 1 tablespoon honey or maple syrup.

Add vanilla, lemon, or almond flavoring to taste.

A fruitshake can be made by using juice in place of milk.

Banana Nut Spread

½ cup crunchy-style peanut butter
½ cup mashed bananas
¼ cup orange juice
Bread of your choice

1. Combine peanut butter and orange juice.
2. Add mashed bananas and blend well.
3. Spread on bread or toast.

Yield: 1¼ cups spread

Banana Coconut Betty

2 cups soft graham bread crumbs
3 Tbsp. melted margarine
¼ cup sugar or 2 Tbsp. honey
2 tsp. grated orange peel
4 cups sliced bananas
¼ cup orange juice
¼ cup water
½ cup flaked coconut

1. Toss bread crumbs with margarine to coat.
2. Line 1½ quart casserole with ⅓ of crumb mixture.
3. Combine sugar, salt, and orange peel.
4. Cover crumbs with half of the bananas and half of the sugar mixture.
5. Cover with another ⅓ of crumbs, remaining bananas, and remaining sugar mixture.
6. Combine orange juice and water; spoon over the top of mixture.
7. Toss remaining crumbs with coconut. Sprinkle over all.
8. Cover and bake 30 to 35 minutes at 375° F.
9. Uncover; bake 5 to 10 minutes longer or until golden.

Topping of whipped cream makes it even better!

Yield: 6 servings

Three-Fruit Shake†

1 banana
½ cup pineapple
¼ cup orange juice

Whiz the fruits and juice in a blender and serve with a tiny mint leaf or a spoonful of sherbet.

Cranberry-Banana Sandwiches†

Bread of your choice
Margarine
Cranberry sauce or other ripe red berries
Banana slices
Pineapple juice

Spread bread lightly with margarine. Cover with bright-red cranberry sauce or other ripe red berries. Arrange slices of banana dipped in pineapple juice on top of the berries.

REFERENCES

* R. A. Seelig. *Bananas, Fruit and Vegetable Facts and Pointers*. United Fresh Fruit and Vegetable Association, Washington, D.C.

† Recipe from "Beautiful Bananas," by Lucille J. Gotham, in *Life & Health*, September, 1971.

This article is adapted from "Food of the Month," *Life & Health*, February, 1973.

IF YOU HAVE A **BREAST LUMP...**

Eight out of ten breast lumps are not cancerous, but may indicate instead the presence of a common benign breast disorder known as fibrocystic disease.

by Gail D. Haake

"You have a large lump in your right breast," the doctor told his young female patient. "It's probably benign, but we'd better do some tests."

Many women hear these frightening words during a routine physical, and instantly panic. The link between breast lumps and cancer has been well publicized—in fact, the media have made breast cancer seem nearly epidemic!

The truth is, however, according to the National Cancer Institute, that eight out of ten breast lumps are benign.[1] And, instead of cancer, a lump in the breast is far more likely to indicate benign breast disease.

"I had a lump in my breast for three years before I saw a doctor," said Cheryl R., a 32-year-old Minneapolis secretary. "And I was scared to death! Deep inside, I just *knew* it was cancer—and I couldn't bear to have a doctor confirm it!"

When Cheryl finally did see a doctor, her lump was diagnosed as fibrocystic disease, the most common benign breast disorder. *The Complete Book of Breast Care* reports that approximately one out of six women between the ages of 35 and 50 has some form of this disease. It usually affects both breasts, and multiple cysts of many sizes are common. Some cysts may actually grow as large as a hen's egg.[2] They are often painful and sometimes must be surgically removed.

The "Catch 22" of fibrocystic disease is that while the cysts themselves are not malignant, a malignant growth may accompany them. Consequently, the disease must be monitored, for cancer is three times more apt to occur in a breast affected by the condition.[3]

Many lumps are discovered by women themselves during self-examination. Fibrocystic lumps, especially, may cause a great deal of pain and are easily felt.

"Breast self-examination should be done at a non-tender time, after the period," says Dr. Paul Jensen, of the Breast Cancer Detection Clinic in Minneapolis. "And," he adds, "any lump or persistently tender spot should be examined by a physician."

The Breast Cancer Detection Clinic puts great emphasis on self-examination and shows its patients a ten-minute movie on the subject. Then, during the examination, a breast-disease technologist and the doctor will point out exactly what to look for. By monthly self-exams, a woman gains a good idea of what her breasts feel like. When a change occurs, or a portion of the breast becomes especially tender, she will be able to point it out to her doctor.

Approximately one out of six women between the ages of 35 and 50 has some form of fibrocystic disease.

When a lump is analyzed, the same detection methods are used for fibrocystic disease as for breast cancer. The four most common methods are aspiration; thermography; mammography; and, sometimes, biopsy.

Aspiration

Aspiration is the process of drawing fluid out of the lump with a thin needle. The National Cancer Cytology Center says that if the fluid removed from the lesion comes out clear and contains only normal cells, then the lump is probably a cyst. Sometimes, after aspiration, the lesion shrinks or disappears completely.

On the other hand, if the fluid is bloody, or contains malignant cells, then the cyst and surrounding tissue should be biopsied. And sometimes, when the fluid is too thick to be drawn through the needle, a lesion can't be aspirated at all.[4] In this case, also, biopsy is usually performed.

Aspiration is limited as a diagnostic tool, however. According to *The Complete Book of Breast Care*, it does not reveal the condition of the tissues surrounding a cyst. Sometimes a malignant growth may accompany a cyst. Furthermore, if there is any residual mass after the aspiration, or if the fluid collects again, most doctors will remove the cyst anyway.[5]

Thermography

A thermogram measures temperature changes of the breast. The patient disrobes from the waist up and sits in a cool room for about ten minutes. Then the physician will instruct her to lean one breast against the thermograph plate. Several photos are taken from the front and then from the side of the breast.

Because a rapidly growing tumor requires an increased blood supply, it emits a higher surface temperature. "Hot spots" are indicated on the thermogram by different colorations in the picture.

The HEW *Breast Cancer Digest* says that although thermography cannot be used to diagnose breast cancer, it may reveal abnormalities that warrant further tests.[6] And, according to Dr. Jensen, 85 percent of breast cancers will have a positive thermogram. Furthermore, thermograms involve no X-ray radiation, and they provide a permanent record of the breast against which future comparisons may be made.

Mammography

Mammograms are probably the most

Gail D. Haake is a published free-lance writer who lives in St. Paul, Minnesota. She graduated from Augustana College in Rock Island, Illinois, with a degree in English. Prior to moving to St. Paul, she was senior copywriter for WHBF, an AM/FM radio station in Rock Island.

publicized diagnostic tool for breast disorders. They are also the most controversial, because they involve patient exposure to ionizing radiation.

The procedure for a mammogram is very similar to thermogram. The X-ray machine has a large rubberlike sphere on the end of it, about six inches in diameter. The patient puts her breast on the photographic plate, and the technician lowers the sphere, sandwiching the breast against the plate. Several shots are taken while the patient is seated, and more while she is lying down.

The benefit of a mammogram is that it is an early diagnostic tool. It can reveal about 10 percent of those tumors that cannot be felt.

During the past five years, many strides have been made in mammography, such as new high-speed film and low-dose radiological techniques that produce sharper and more detailed images. The dosage of radiation produced by mammographic equipment varies, however. Breast size and density are also factors in the amount of radiation absorbed. For these reasons, the National Cancer Institute encourages women to ask about the amount of radiation to which they are being exposed.

The most radiation that should be emitted, according to NCI, is 1.0 rad (radiation absorbed dose) to the skin and 0.3 rads to the tissue. The Institute does not recommend mammograms for women under 35, because breast cancer for that age group is very rare. Between ages 35 and 39, if the woman has had breast cancer, a mammogram is recommended annually. Past age 50, annual mammography may be considered.[7]

The HEW *Breast Cancer Digest*, published in 1979, has a further word of caution regarding mammography—the potential for carcinogenic effect of radiation on the breasts may not become evident for ten to twenty years after exposure.[8]

Despite this, it is generally felt that the risks of mammography are far less than the possible benefit in a patient with a known breast lump.

Biopsy

Although many women with fibrocystic disease never undergo surgery, some situations warrant biopsy—if the lump is solid, or if there is a single lump that persists and is painful, for example.

The biopsy operation takes approximately thirty minutes. According to the discretion of the doctor, the patient may be unconscious during the operation or may be merely given a local anesthetic. After the cyst is removed, it is sent to the pathologist for examination, often while the patient remains on the operating table. The pathologist determines if the lesion is benign or malignant.

Is there a cure for fibrocystic disease? Possibly—by avoiding coffee, tea, cola drinks, and chocolate.

Is there a cure for fibrocystic disease? Possibly. In 1979, a study conducted by Dr. John Minton, of Ohio State University at Columbus, received a great deal of publicity. Women with fibrocystic disease were advised to avoid coffee, tea, cola drinks, and chocolate. These substances contain a common enzyme called methylxanthines, and Dr. Minton's report, delivered to the Society of University Surgeons, claimed that out of twenty women tested, thirteen lost all signs of the disease within half a year.[9] Although this study is provocative, further research will be needed to confirm this approach.

What causes fibrocystic disease? It is thought to be a metabolic condition associated with a hormone imbalance.[10] It occurs in the estrogen-producing years of a woman's life. As Dr. Jensen explains it, "The fact that fibrocystic disease peaks during the mid to late 30s implicates estrogen." Often all traces of the disease will disappear after menopause occurs.

Fibrocystic disease is extremely common, but it receives little publicity. The reason for this is that, as with breast cancer, its primary symptom is a hard, painful lump. And, because it is so vital to detect cancer at an early stage, the focus has been on the malignant breast diseases rather than on the benign ones.

But benign diseases need publicity, too, for two reasons. Often, when a woman discovers a lump in her breast, she instantly thinks, Cancer! Fear of the disease and dread of possible mastectomy may actually make her hesitate to see a doctor. But with better education, this initial panic could be avoided; and a woman knowledgeable about benign diseases would be less afraid to seek immediate treatment.

The second reason for publicizing fibrocystic disease is this: True, it is a benign disease; that is, the cysts themselves are not malignant and do not become malignant. However, it seems that a breast tissue climate conducive to fibrocystic disease is also conducive to breast-cancer cells. Thus, a malignant tumor may grow side by side with a nonmalignant fibrocystic lump. And the National Cancer Institute says that a young woman who now has fibrocystic disease stands a slightly greater chance of developing breast cancer later on in life.

For this reason, monthly breast self-examination is vital for all women as are yearly exams by a physician. For diagnosed fibrocystic disease, some form of periodic monitoring is recommended. It is a great relief to know that a breast lump is benign. But at the same time, women must realize that this common disease is one that bears close watching. ❦

REFERENCES

[1] *Progress Against Breast Cancer—What You Can Do About It*, U.S. Department of Health, Education, and Welfare, Public Health Service, National Cancer Institute, DHEW Publication Number (NIH) 79-1621.

[2] Robert E. Rothenburg, *The Complete Book of Breast Care* (New York: Ballantine Books, 1976), p. 177.

[3] *Ibid.*

[4] *Early Warning Against Breast Cancer Through Aspiration Biopsy*, National Cancer Cytology Center, Melville, New York.

[5] Rothenburg, *op. cit.*, p. 179.

[6] *The Breast Cancer Digest*, U.S. Department of Health, Education, and Welfare, Public Health Service, National Cancer Institute, Bethesda, Maryland, p. 22.

[7] Robert J. Avery, Jr., Chief Public Inquiries Section, Office of Cancer Communications, National Cancer Institute, letter dated April 10, 1980.

[8] *Breast Cancer Digest*, p. 19.

[9] John P. Minton, M.D., M. K. Foecking, M.S., D. J. T. Webster, Ch.B., F.R., C.S., and R. H. Matthews, Ph.D., "Caffeine, Cyclic Nucleotides, and Breast Disease." Paper presented at the 40th Annual Meeting of the Society of University Surgeons, Salt Lake City, Utah, February 15-17, 1979.

[10] Rothenburg, *op. cit.*, p. 179.

BIBLIOGRAPHY

Early Warning Against Cancer Through Cytology, National Cancer Cytology Center, Melville, New York.

Interview with Paul A. Jensen, M.D., Breast Cancer Detection Clinic, 6517 Drew Avenue South, Edina, Minnesota 55435.

A MOVE IN THE RIGHT DIRECTION:

EARTHQUAKE PREPAREDNESS

by Stephenie Slahor, Ph.D.

On a rather routine business day, clerical workers were sitting at their desks in a large corporation office in northern California when suddenly silence fell over the room. Eyes were riveted on the plants, whose leaves were shaking. Other things in the room were shaking, too, and there was a slight sensation of motion under the feet. Then, just as suddenly as it began the movement stopped. A sigh of relief swept over the room, and typewriters began clicking again—this was not the "big one." It was just a typical West Coast tremor.

Though, fortunately, most earthquakes are mild like this one, many are not, and we still have no way of knowing when or where the "big one" will occur. Earthquakes pose potential dangers to personal safety, especially to those who are not adequately prepared to cope with the violent rolling and shaking and the aftermath of quakes.

Panic is one of the greatest dangers to safety. Despite the noise and motion that accompany a quake, there is no cause for panic if a few safety rules are heeded.

If you are inside, at the first sensations of rolling and/or shaking, take cover under some sturdy furniture, such as a desk, table, or other large, heavy, well-supported furniture. Try to stay in the center of a building—in an inside hallway, against inside walls, or under inside doorways. Stay away from windows or any other glass.

If you are outside, try to get to an open area away from buildings, utility poles and wires, and large objects such as signs. Watch in all directions for falling debris. If in an auto, stay inside it, but bring it to a stop in a clear area, not under signs, bridges, overpasses, or buildings. The car will probably bounce and sway, but it should be able to "ride out" a quake.

When the quake ends

After an earthquake, don't light any matches, fires, or candles. Use flashlights instead. If there is damage or failure of any utilities, turn them off at the main control point serving the building. If the natural gas is leaking, turn it off at the control point and open the windows to ventilate the building. Report the leakage, if possible. Leave the building if natural gas leakage occurs.

Use the phone only to report emergencies. Keep listening to radio or television to keep informed of current conditions.

Be careful when opening any closet or storage-area doors. Jumbled items within the closet may be dangerously

Stephenie Slahor has a Ph.D. in educational administration and a J.D. in law. She is an attorney in Palm Springs, California, and also has been a free-lance writer for many years, particularly in the fields of outdoor and survival skills and outdoor activities. She has authored a number of books, the latest of which is The Layman's Guide to Horse Health Care.

close to the door as it opens. Remember, too, that rubble may block exits, so anticipate having to use another means of exit. Don't use elevators; use the stairways instead. Always watch for debris. Aftershocks should be expected, and they can loosen overhanging objects, plaster, building cornices, and other objects.

If possible, don't go outside without sturdy shoes or boots and some head protection, such as a hard hat.

As you travel, stay away from avalanche or landslide areas, and watch for any spilled chemical substances and broken utility lines.

Tsunamis—commonly, but inaccurately, called tidal waves—pose a danger to anyone along the coastline or on an oceanic island. They come in a series of waves, and the first ones may be small. At a tsunami warning or after an earthquake in the area, leave low-lying coastal areas. Remember that a tsunami at one beach may be small, but be very large at a beach a few miles away.

Preparedness

Though earthquakes can't yet be predicted, you can take some precautions to minimize injuries in the event an earthquake strikes your area.

Though earthquakes can't yet be predicted, you can take some precautions to minimize injuries in the event an earthquake strikes your area.

Any top-heavy furniture such as bookcases, china cabinets, storage cabinets, shelves, or files should be fastened to the wall. Heavy items stored in these cabinets should be close to the floor, with lighter objects at the top. Bolt down heavy appliances, such as the water heater, and use connections that can flex and "give."

Keep on hand battery-operated radios and several flashlights with extra batteries and bulbs. Store water, food that won't need water for heating or cooking, and a first-aid kit. Be familiar with first-aid procedures by taking a course or by reading on the subject. Guardrail bars should be installed across any floor-to-ceiling windows that are above ground level. Know where the main utility switches and control points are and keep other family or office members informed of these control points also.

With the use of your common sense and safety knowledge, you can help maximize the safety of yourself and those around you during and after an earthquake. ❦

BIBLIOGRAPHY

Films: *Earthquake, Our Active Earth*, and *Though the Earth Be Moved: The Alaskan Earthquake*. These are available from the Federal Emergency Management Agency, 1725 Eye Street NW., Washington, D.C. 20472.

Games That Teach (MP-59), Federal Emergency Management Agency.

The Great Alaska Earthquakes of 1964 (8 volumes—the summary is in volume 8), Washington, D.C.: National Academy of Sciences.

In Time of Emergency—A Citizen's Handbook of Nuclear Attack and Natural Disasters. Federal Emergency Management Agency, 1725 Eye Street NW., Washington, D.C. 20472. Booklet Number H-14 (Spanish language version: H14-A).

Personal and Family Survival (SM 3-11), Federal Emergency Management Agency.

Dentists go off the gold standard

One of the most important topics discussed at the 56th Annual Greater New York Dental Meeting in December, 1980, was the sky-high prices for gold and silver and how to circumvent them. These two precious metals have been the mainstay of the dental profession for decades, but now their costs are beyond the reach of many dental patients.

The dental profession has been hard at work evaluating alternative materials and techniques. Most promising to date are space-age techniques using nickel-chrome alloys to which ceramics can be fused in constructing crowns and bridges. Other techniques and materials are under intensive study.

Dr. Gordon J. Christensen, of Clinical Research Associates, Provo, Utah, reported on the use of microfilled resins. He said these smooth surface plastic filling materials have many of the advantages of gold and silver in that they do not collect food stains, they blend well with the color of the teeth, and they can be worked like the metals. He also reported that other metals are being tested for dental use.

Diet, nutrition, and cancer studied

A broad study about diet, nutrition, and cancer will be conducted by a National Research Council committee at the request of the National Cancer Institute. The committee will conduct an in-depth review of what is known about various dietary components and their possible relationship to cancer and prevention, as well as develop recommendations for future research. They will examine individual dietary factors, including calories, nutrients, food additives, and contaminants. The committee will also try to assess the effects of changes that may occur during the processing, preparation, storage, and consumption of foods.

The committee will operate under the guidance of the National Academy of Sciences' Assembly of Life Sciences. It will be directed by Dr. Shushma Palmer of NAS and chaired by Dr. Clifford Grobstein, University of California (San Diego).

—New release, Calorie Control Council, Atlanta, Georgia

Watch out—the grocery bag is loaded

Shopping bags can be hazardous to your health, says Dr. Meyer Naide, of Graduate Hospital in Philadelphia.

The problem bags, he says, are those filled with heavy groceries. One of Naide's patients recently complained of acute chest pains after carrying a full grocery bag from car to house. Another was hospitalized for a week because of low back pain from the same cause. Naide notes that anyone with a history of heart disease, low-back problems, or hernias should be wary of the loaded shopping bag.

The "loaded-shopping-bag syndrome" can be avoided, says Naide. Try to distribute the weight of your groceries. Ask the checkout clerk to put one heavy item in a bag with several lightweight items. Try using smaller bags. It's better to make several trips from the car to the house than one trip from the house to the hospital!

—News release, Health Insurance Institute, Washington, D.C.

SHHH—an organization to help the hard of hearing

The deaf make themselves heard—few hear about the hard-of-hearing. To counteract this situation and help the hard-of-hearing help themselves, Howard E. (Rocky) Stone of Bethesda, Maryland, has formed a national organization to help hard-of-hearing people. Stone lost his hearing during World War II. Although audiologically deaf, Stone is functionally hard-of-hearing. He says that of the more than 16 million hearing-impaired people in America, fewer than 2 million are deaf; more than 14 million are hard-of-hearing. There are similarities between the two groups, but there are many differences. Stone's emphasis is on hard-of-hearing people.

SHHH, Self Help for Hard of Hearing People, Incorporated, was founded in 1979 because of Stone's conviction that little progress can be made in helping the hearing-impaired until both those who hear well, and those who do not, better understand the nature, causes, complications, and possible remedies of hearing loss. SHHH seeks out those who suffer from hearing loss. It involves them in activities, educates them about the problem, and instructs them about detection, management, and possible prevention of further loss.

SHHH is equally concerned with education of hearing people. They are encouraged to join in the fight against America's most pervasive physical handicap. Services of SHHH include: a journal about hearing loss (six times a year), a periodic SHHH newsletter, a chapter manual, remedial-aid discounts, referrals and advisory services, information and resource centers, seven special study groups, advocacy and representation, and a national constituency and conventions. At the chapter level, services include: self-help action and activities, neighbor-to-neighbor programs, social and recreational programs, referrals, community resource, and Crisis Hotline (CRISHHH).

Annual dues for SHHH are $7. Anyone who would like to join or who wants more information may write to: SHHH, P.O. Box 34889, Washington, D.C. 20034.

The Germans have cut down on smoking

More and more Germans are giving up smoking, and they are doing so at a remarkable rate. Today 60 percent of German adults, 14 years of age and older, do not smoke. Back in 1950, smokers held a majority in this country, with 51 percent of the adult population smoking.

Though the decrease in smoking has been substantial among men—88 to the present 53 percent—the proportion of women who smoke has crept up from 21 to 29 percent since 1950. In 1976 (compared to 61 percent in 1972) 72 percent of the nonsmokers said they favored a bill prohibiting smoking at work, indicating that the social isolation of smokers appears to be on the increase and life as a smoker is getting tougher.

—News release, The Allensbach Report, Federal Republic of Germany.

Diet? Try it!

Folks trying to lose weight—
in almost every instance—
Must follow the path
of feast resistance.

Everett E. Duncan

JOG

FOR YOUR HEALTH — ENJOYMENT — RELAXATION — . . . Shape up in Just 15 MINUTES A DAY.

Jogging is one of the best all-round exercises there is. It makes you feel good, shapes you up — and does wonders for your cardiovascular system. But it's not always easy to climb into jogging clothes and head for the wide-open spaces. The inclined track of the Contour Jogger® treadmill simulates outdoor running conditions. Because your hands are free and your arms swing naturally your upper torso moves in natural rhythm and you jog as easily and freely as you do on a cross-country run.

® BATTLE CREEK EQUIPMENT
307 W. Jackson St., Dept. 70S
Battle Creek, MI 49016

Please Send Free Contour Jogger Information

Mr.
Mrs. ____________________
Ms. (Please Print)

Address ____________________

City ________ State ______ Zip ______

©Battle Creek Equipment Company 1980

Bran implicated in body zinc loss

Preliminary studies by researchers at the Georgetown University Medical Center indicate that high-fiber, bran-enriched foods, such as bran muffins, alter the body's zinc metabolism and increase the total loss of zinc.

Researchers studied the effects of a high-fiber diet on 43 volunteers. The volunteers were tested periodically to evaluate changes in zinc metabolism as a result of eating high-fiber bread rich in bran for a five-to-nine-month period.

At the end of this time, the researchers found that the volunteers who had been eating bread and muffins with bran experienced a higher loss of zinc than those who were eating a high-fiber white or wheat bread.

According to Robert I. Henkin, M.D., principal investigator of the study, "This bran effect, which increases the total body zinc loss, is dependent upon the amount and type of fiber consumed. Because bran can often be a major component of high-fiber diets, it is important that consumers are aware of the potential health problem of a high-fiber bran diet. A zinc deficiency may cause irritability and temperament change as well as other problems such as skin rashes, taste loss, and loss of appetite."

Zinc has been established as one of the more-important metals in the human body. It contributes to growth, liver and muscle function, protein synthesis, and general stabilization of cell membranes.

—News release, Georgetown University, Washington, D.C.

Nutrition Foundation renews debate over Feingold diet hypothesis

The National Advisory Committee on Hyperkinesis and Food Additives, a panel of experts assembled by the Nutrition Foundation, last fall declared that there is no good evidence that artificial colorings cause hyperactivity in children or that such children benefit from the diet advocated by Benjamin Feingold. The panel's final report concluded that studies carried out by investigators over a five-year period "provide sufficient evidence to refute the claim that artificial food colorings, artificial flavorings, and natural salicylates produce hyperactivity."

These conclusions were challenged by several scientists, including one committee member, and by the Feingold Association, a nationwide network of parents of hyperactive children. The association contended that 20,000 children are being helped by the diet and charged that the Nutrition Foundation, which appointed the panel, is biased because it is funded by the food industry.

Earlier this year studies described in *Science* magazine offered support for the Feingold hypothesis. The researchers also challenged interpretations of earlier studies that seemed to provide no support for the hypothesis.

—CNI Weekly Report, Washington, D.C., October, 1980.

Sick over it

The very worst part of my cold
Was not the sinus headache's hold,
The endless running of the nose,
The achiness from head to toes,
Or even the sore throat's aggravation.
It was that I had it on vacation.

Donna Evleth

New Sleeping Comfort

Our product provides soothing, relaxing warmth from below. Why use up vital body energy warming a cold, damp bed? Electro-Warmth will stop this waste, and you'll feel a big improvement the very first night. Completely automatic and patented. Makes electric blankets obsolete. Five-year warranty. Warmers are available for beds of all sizes.

Send for free additional information.

The Electro-Warmth Co.

4115 Aspen Street, Washington, D.C. 20015

Research may make milkweed an important crop

A report has been released describing how developing an improved variety of milkweed could provide a new source of energy as well as feed for stock. It also could be used in chemicals and rubber.

Researchers at the Battelle Columbus Laboratories are investigating genetic techniques to more rapidly breed highly productive varieties of milkweed. "The national need for self-sufficiency in energy and basic raw material requires that new crop sources be developed in the United States," say Battelle's Dr. George H. Kidd and Suzanne S. Groet, who are leading the study. "Milkweed species are among the most valuable crops for potential nonfood commercializations. The development of an improved variety could provide a source of biomass for conversion to synthetic fuels and chemical feed stocks, as well as a source of fat, protein, oil, and fiber."

This is a good example of how modern technology can be applied to ideas first advanced years ago. Thomas A. Edison researched milkweed as a source of synthetic rubber back in the 1930s. Now the Battelle laboratory is utilizing modern technology, including tissue culture, which was not available at the time of Edison's original work.

—National Society for Medical Research Bulletin (Vol. 31, No. 10), Washington, D.C.

Portable electric appliances can help cut energy costs

The electric range is a major energy user in the home, while small appliances, as the name applies, are small energy users. Far less energy is used when foods are prepared with small electric appliances rather than on top of the range, according to Oster, a leading housewares manufacturer.

A recent study conducted by the Oster Home Economics and Engineering Departments compared the energy cost of range-top cooking versus cooking with small appliances. It was found that an electric egg cooker uses 64 percent less energy when used to prepare soft-cooked eggs, hard-cooked eggs, and poached eggs. Using an electric crepe maker saves 61 percent of your cooking cost. An electric fondue costs 40 percent less. When deep frying foods, 38 percent of the cooking energy can be conserved. An electric grill can save 7 percent of the cooking cost.

The study concluded that using portable appliances as an alternative to the range top will help consumers reduce energy consumption in the home.

—News release, Oster, Milwaukee, Wisconsin.

Free health pamphlets available

The Care and Safety of Young Children, Jay M. Arena, M.D. May be ordered from Council on Family Health, 633 Third Avenue, New York, New York 10017.

Solar-Energy Pamphlets: "Solar Energy Catalog," "Commonly Asked Questions on Solar Energy," "Heating—The Solar Way," and "Passive Solar Heating and Cooling." Send your request with a self-addressed, stamped business envelope to Centerline Company, Dept. 162, 401 S. 36th Street, Phoenix, Arizona 85034.

Information Available From USDA's Food Safety and Quality Service lists publications, fact sheets, periodicals, posters and charts, slide sets and filmstrips, and motion pictures on FSQS programs and services. Many of the items offered are free. The catalog includes information for consumers and the food industry. Some consumer materials are also available in Spanish. Ask for FSQS-6 (December, 1979). Write: FSQS Information, Room 3606-S, USDA, Washington, D.C. 20250. Phone: (202) 447-5223.

STAINLESS STEEL Home Water Distillers.

DISTILLATION LIFTS WATER

from Chemicals and Impurities!

HOME SAFETY EQUIP. CO., INC.
P.O. Box 709-LH, New Albany, Ind. 47150
Toll Free Hotline—1-800-457-2400

Send complete information on distillers. No obligation — no salesman will call.

MOVING?

Eight weeks before you go, let us know.

For faster service, attach your current address label (from magazine cover or wrapper) in the space indicated. Then fill in your new address and mail to LIFE & HEALTH Circulation Department, 6856 Eastern Ave., NW., Washington, D.C. 20012.

NEW ADDRESS:

Name ______

Street or P.O. Box ______

City ______

State ______ Zip ______

Attach your address label from current issue here.

PHOTOS BY BILL COATES

How You Can Help When There's a Death in Your Friend's Family

by Dorice Knoll

My family returned from choosing my mother's casket. As I got out of the funeral director's car, our old family friend Jim Conner rose slowly from our porch steps and came down to meet us. It was so good to see him. Just his unexpected presence gave us all a lift. All he said was, "I've come to do your shopping and run any errands you'd like done."

What Jim did so unself-consciously I wouldn't have had the courage to do prior to my mother's death. Indeed, I'd have been most reluctant to deal with so devastating an emotion as someone else's bereavement. I also would have felt that I'd be intruding and that my presence might not be desired.

The reason for Jim's knowledgeable actions was that he had lost his mother just the month before. Friends had helped him through the difficult time (I'm sorry to say I wasn't one of them); from that he had learned what was acceptable and appropriate, and, fortunately for my family, he put it to immediate use.

All you really need is a loving heart that wishes to ease the burden of a grief-stricken friend in whatever way you can.

You don't need a list of things to do. But these few suggestions may help when you really want to be a comfort and you don't quite know how. I hope they will also help to banish the formally voiced concern, "If there's anything I can do, just call me." I still wince when I think how many times I've said that over the years. The words are born of sincere sympathy but with that helpless, inadequate feeling we have when someone sustains a terrible loss and we can't think how to ease his pain.

There are definite things you can do. Even when they seem insignificant to you, they're deeply appreciated by the grieving recipient.

Make specific suggestions

The one point to remember in offering to help is to try to be specific. Jim's shopping help came from intimate knowledge of our family. Had he asked, "What can I do?" I doubt any of us could have thought of a thing. But he knew we'd just returned from a vacation and probably hadn't stocked up on food yet.

He knew, too, from his own recent experience, that going out in public so soon after a death is very difficult. Our emotions are so raw at this time, and we don't like to chance breaking down at

Dorice Knoll lives with her husband in Emmaus, Pennsylvania. She earned a Bachelor of Arts degree at Moravian College in Bethlehem, Pennsylvania, and did graduate work at Columbia University and New York University. She then did free-lance work in advertising and in public relations in the heart-health and social-work fields. Two years ago she terminated all accounts to do more writing.

the checkout counter in the supermarket or bumping into an unsuspecting acquaintance inquiring about the family without prior knowledge of our loss.

Offer to do the out-of-the-house chores like mowing the lawn, shoveling snow, weeding the garden, having the car serviced. Somehow, these chores don't seem appropriate to grieving and are difficult to perform for a while.

There are other outside contacts you might undertake. Offer to answer the telephone before and right after the funeral; answer the doorbell—in essence, "baby-sit" the house to relieve the family and give them a chance to refresh themselves or to get much-needed rest.

Food at this time is often a real chore to think about. The family members frequently aren't hungry or forget to eat until their bodies protest. This is especially true if there are no young children in the house to remind them that it's mealtime. If you're familiar with their kitchen, you might prepare their meals. An easier, less obtrusive way, of course, would be to bring in one-dish meals that just need reheating. Have the contents clearly identified and include instructions for reheating.

More things you can do

Where there are young children, your services to entertain them or baby-sit with them during the funeral would be warmly welcomed. Finding a baby-sitter quickly with the whole family unavailable might be difficult.

Helping to address and mail the death notices may help.

Once the funeral is over, as a friend you'll sense whether they wish peace and quiet or company. Sometimes aloneness at this time is unbearable, following all the hectic activity.

These are the days that they may appreciate an invitation to dine with you in your own home. Assure them

It all comes down to the desire to help and then putting that desire into action.

first there will be no other company unless they wish. They may not be ready for public dining or may not wish any sociability of a more casual-acquaintance type. Each first social encounter after the funeral can be hard to countenance for a while. The sounds of sympathy we're wont to make, the searching questions of the less sensitive, the constant reassessing of relationships, particularly if the deceased was the spouse—all take time to adjust to.

Drop in for a visit with a young friend in tow; a young sister, niece or nephew, your sister's 6-month-old baby. There is something so refreshing, so heartening, about the presence of a child at this time. Maybe it's the reassurance of ongoing life, the appeal of unaffected behavior, the absence of pity.

Take along on some pretext one of your own amusing, interesting friends. Offer to pick up an old friend of the bereaved's.

"Getting over" a loss by death is not the proper phraseology. You never "get over" your loss. You just gradually begin to accept it and live with it. But special days once shared with the now-deceased family member can renew the pain and sharpen the sense of loss long after we begin to adjust. You can help ease these times by knowing what those days are: birthday, anniversary, holiday traditions, for instance. Help to keep your friend occupied on the deceased's birthday, perhaps, without making a point of it. Suggest some activity or trip on a wedding anniversary. Or your invitation to share your celebrations with them may help.

It all comes down to the desire to help and then putting that desire into action. Feeling timid about it or being ill at ease with the bereaved will disappear in the light of the grateful reception you'll get. The more frequently you extend yourself to those in need of solace, the greater will your contributions become.

Trust your heart and act on your loving impulse. You just can't go wrong.

Reviewing or listing of books does not constitute endorsement.

The Doctor's Walking Book—How to Walk Your Way to Fitness and Health, Fred A. Stutman, M.D., with Lillian Africano. Order from Ballantine Books, 400 Hahn Road, Westminster, Maryland 21157, 1980, 111 pages, $5.95 paperback ($6.95 in Canada).

Himself an avid walker, Dr. Fred A. Stutman presents walking as "the perfect exercise." Dr. Stutman discovered the benefits of walking in his own busy life and became enthusiastic enough to pass his discovery on to his patients. The author gives a physiological explanation of why he believes the human body is better constructed for walking than for any other exercise. He compares the benefits of walking against possible complications in running. He says, "With proper precautions, no doubt, many of these complications probably could be prevented or averted; however, it does seem a shame to have to worry about hazards and side effects of an activity that is supposed to be fun and healthful. I think the majority of us would prefer an activity or exercise that is safe, healthful, fun and effective—walking fits this description perfectly."

The author goes on to discuss increased oxygen intake with walking as an aerobic exercise. He feels it must be done continuously for at least 30 to 60 minutes three times a week. Walking may increase the heart rate only 40 to 50 percent above normal (as compared with 70 to 85 percent with more strenuous exercises). However, Dr. Stutman believes that this is more than enough.

The value of walking is discussed in reducing the risk of heart attack, in aiding circulation, as a cure for hypertension, relieving stress, and as a pleasant exercise for retirees, as well as others. The book gives the complete "Walker's Weight Control Program" and presents time and distance schedules for beginning and maintenance walking.

EMR

On the Road: The Marathon—Joys and Techniques of Marathon Running, Jim Shapiro. Crown Publishers, Inc., One Park Avenue, New York, New York 10016, 1978, 178 pages, $5.95 paperback.

Includes interviews with running greats and analyzes an assortment of training techniques.

The Fast Food Calorie Guide, Marcia LaSota. Gabriel Books, Minnesota Scholarly Press, Inc., P.O. Box 224, Mankato, Minnesota 56001, 1980, 138 pages, $2.95 paperback.

Walk Don't Run, Simon J. Wikler. Windward Publishing, Inc., 105 NE 25th Street, P.O. Box 371005, Miami, Florida 33137, 1980, 125 pages, $4.95 paperback.

Dr. Simon J. Wikler calls walking the American fitness exercise of the eighties because people can participate in it "without running the risk of injury and heart attack."

The author tells us how to walk, how to check our feet, and what shoes to wear. He discusses foot care and the consequences of not walking and explains how we can prevent foot problems in our children. Dr. Wikler knows of what he writes—he is a practicing podiatrist in Miami, has authored two other books on foot health, and has been issued nine patents relating to inventions on footwear.

Dr. Wikler concludes his book by predicting that "ultimately, and soon, everyone will recognize the importance for all of us to walk at least one brisk continuous mile every day." EMR

Exercise: The Why and the How, Paul Vodak. Bull Publishing Company, P.O. Box 208, Palo Alto, California 94302, 1980, 77 pages, $3.95 paperback.

No single exercise or sport is the best for everyone. In this book the individual learns to analyze those qualities of an exercise that make it the right one for him. Whether you want to lose a few pounds, improve muscle strength and tone, relieve stress, enjoy better health, or just feel and look better, this is the book that will instruct you in finding the best exercise to help you do it.

Paul Vodak is an exercise physiologist at the Stanford Heart Disease Prevention Program in Palo Alto, California, and a member of the American College of Sports Medicine. He has also worked with the National Athletic Health Institute in Los Angeles, where he provided fitness evaluations and counseling for business executives and professional athletes.

A Practical Guide to Small-Scale Goatkeeping, Billie Luisi. Rodale Press, Inc., Emmaus, Pennsylvania 18049, 1979, 208 pages, $8.95 hardcover.

I Can Do It! I Can Do It! Cookbook for People With Very Special Needs, Patricia Bell, editor. K & H Publishing Company, Inc., 3475 Via Oporto, Suite 204, Newport Beach, California 92663, 1979, 64 pages, $15 hardback.

This unique volume has been prepared for use by people afflicted with mental retardation and learning disabilities. By the use of detailed instruction and illustrations, the book makes it possible for such persons to gain a sense of accomplishment and independence by enjoying the process of preparing simple recipes. It helps them not only to expand their capabilities but also to develop coordination and dexterity.

The K & H Publishing Company looks forward to providing more books for the mentally retarded that will include information about basic housekeeping, personal hygiene, and travel aids.

The New VOGUE Sewing Book. Butterick Publishing, 708 Third Avenue, New York, New York 10017, 1980, 511 pages, $19.95 hardback ($21.95 in Canada).

During the past decade *The VOGUE Sewing Book* has been instructing sewers in how to create professional-looking, well-constructed wardrobes at home. Now its publishers claim that *The New VOGUE Sewing Book* is even better—it includes absolutely "everything today's sewer needs to know." Complementing a thorough text are 56 pages of new full-color photographs and more than 1,800 new and revised line drawings that clearly illustrate every fashion and construction point.

The volume takes the sewer through every step from selecting correct pattern size to making alterations for the perfect fit. It can be aptly called "a sewing school in a book."

Kicking It: The New Way to Stop Smoking Permanently, Dr. David L. Geisinger. Signet Classics, The New American Library, Inc., 1633 Broadway, New York, New York, 10019, 1978, 160 pages, $1.95 paperback.

This famous program promises: "In five weeks you will smoke your last cigarette and never smoke again."

For Women of All Ages, Sheldon H. Cherry, M.D. Signet Books, The New American Library, Inc., 1633 Broadway, New York, New York 10019, 1979, 250 pages, $2.95 paperback.

A gynecologist's guide to modern female health care.

Creative Food Experiences for Children, Mary T. Goodwin and Gerry Pollen. Center for Science in the Public Interest, 1755 S Street NW., Washington, D.C. 20009, revised edition 1980, 256 pages, $5.95 ($6.95 Canada) paperback, $12.95 hardcover.

Creative Food Experiences is an activity-packed book for parents and teachers, based on the premise that children learn best by doing. "In this day of canned, boxed, and machine-vended food," says coauthor Gerry Pollen, "it's vital that we help children appreciate real food."

In fact, Goodwin (a public-health nutritionist) and Pollen (an early-childhood and elementary-school teacher) designed this book specifically to help instill in children the dietary habits advocated by the Surgeon General and the United States Department of Agriculture. Its emphasis is on eating whole grains, fresh fruits and vegetables, low-fat dairy products, and other healthful foods.

The book is not merely a nutritional primer, however. Its range of activities has been created to help children develop math, language, science, social, and art skills, as well. Children are involved in every aspect of food—growing vegetables, shopping for groceries, making raisins, baking bread, and of course, eating. In addition to a variety of learning activities structured around each of the four basic food groups, teachers should find these additional aids useful: a list of food-information resources, suggested activities for expanding the school nutrition curriculum, and a collection of more than fifty recipes reinforcing lessons learned in activities. DGN

The Diabetic Gourmet, Angela Bowen, M.D. Harper & Row Publishers, Inc., 10 East 53d Street, New York, New York 10022, 1970, revised edition, 1980, 195 pages, $10.95 hardback.

Though it is agreed that diet is the most important part of the treatment of diabetes, it is often difficult for the homemaker to cope with prescribed diets, and few diabetes centers provide adequate guidance in this area.

A diabetic can enjoy meals that are appetizing, full of variety, and suitable for the whole family, and this book tells how to prepare them. Even favorite recipes can be adapted to the diabetic diet. Each recipe gives the amount of carbohydrates, proteins, and fat per serving, as well as the number of calories.

This volume has been written by a medical specialist. Dr. Bowen is a graduate of the University of Washington School of Medicine. She completed a fellowship in metabolic diseases at Virginia Mason Medical Center in Seattle, and has been active in diabetes research since 1964. She is past president of the Washington Diabetes Association, and has served on the Food and Nutrition Committee of the American Diabetes Association.

Marathoning, Manfred Steffny. World Publications, Inc., 1400 Stierlin Road, Mountain View, California 94043, 1979, 194 pages, $5.95 paperback.

Internationally acclaimed German distance runner and coach offers advice to novices who aspire to become marathoners. A guidebook for marathoning.

Childhood Illness and Childhood Injury, Jack G. Shiller, M.D. Stein and Day, Scarborough House, Briarcliff Manor, New York 10510, 1980, 574 pages, $14.95 hardback.

For the convenience of parents, these two definitive works on the illness and injuries of children have been combined in one "reassuring and informative" volume, reports *The Library Journal. Childhood Illness* deals with when and how to care for sick children at home; *Childhood Injury* covers a complete range of internal and external injuries and preventive measures.

Dr. Shiller's purpose in this guide, based on his belief that many visits to a pediatrician are unnecessary, is to help parents evaluate a child's condition. He shows parents when and how simple disease and injury can be treated at home, and alerts them to the times when professional medical help should be sought at once.

Dr. Shiller, a pediatrician in Westport, Connecticut, has organized his book for easy reference according to symptom group. In addition to full chapters on common problems—from bellyache to insect bites—an extensive glossary defines additional diseases, conditions, and other terms. Appendixes provide information on immunization schedules, over-the-counter drugs, growth charts, safe toys, and illustrations of poisonous plants.

Good Things for Babies, Sandy Jones. Houghton Mifflin Company, Boston, Massachusetts, 1980, 115 pages, $6.95 paperback.

Here is a sourcebook of safety and consumer advice for parents, picturing more than 150 items for babies up to 2 years of age. It is "a valuable reference book," writes the well-known pediatrician Dr. Benjamin Spock, "on all the things that are needed for babies."

Author and mother Sandy Jones has written this second edition of *Good Things for Babies* as the result of interviews with more than 200 parents and research—aided by several safety organizations—on manufacturers and products.

Her book is organized alphabetically into chapters on a variety of baby-care products, including beds, books, car seats, diapers, feeding utensils, safety aids, toys, and more. Each chapter points out the dangers to beware of in purchasing things for babies and lists useful and safe features to look for, as well. A general summary on the correct use of the product is also given. Specific recommended items are clearly pictured and described, along with their current prices and mail-order information. DGN

Root Cellaring, Mike and Nancy Bubel. Rodale Press, Emmaus, Pennsylvania 18049, 1979, 297 pages, $11.95 hardback.

How to use the earth's natural coolness as a simple, no-processing way to store fruits and vegetables.

IF I DRINK WATER THAT CONTAINS SODIUM FLUORIDE OR USE A FLUORIDE TOOTHPASTE WILL MY TEETH BE 100 PERCENT FREE OF DENTAL DECAY?

If you drink water containing one part sodium fluoride to one million parts of water, brush your teeth after each meal with a stannous-fluoride toothpaste, and use dental floss between the teeth, you can have up to 65 percent less tooth decay, but not 100 percent. However, if you also limit your between-meal sweets and see your dentist regularly, your chances of preventing the other 35 percent are good.

Myths still exist

The prevention of tooth decay is just one aspect of dental care that is still suffering from some old-fashioned myths. Do *you* know your dental fact from fiction? Check it out in the new Life & Health supplement, the Dental Health Special. Six different, fully illustrated articles on personal dental care make this handy booklet a great reference guide for the entire family.

Get the facts straight about teeth. Order your copy of the Dental Health Special.

Please send me ______ copy(s) of the new Dental Health Special. I have enclosed my check or money order for US$.70 per copy.

Name ______________________

Address ______________________

City ____________ State ____ Zip ____________

Please mail this to: Periodical Dept., Review and Herald Publishing Association, 6856 Eastern Avenue NW., Washington, D.C. 20012.

Price subject to change without notice.

INTRODUCING OUR NEW SWISS STEAK. IT'S TOO GOOD TO BE TRUE.

Loma Linda's new Swiss Steak with Gravy has so much of the taste and texture of steak that you may even think it's better than the real thing.

That's because it contains Loma Linda's own special ingredient, combining two different vegetable proteins. This special blend results in better texture plus a more favorable nutritional balance.

Loma Linda's new Swiss Steak is precooked and comes smothered in its own rich gravy. So you just open a can and it's ready to heat and serve.

Our Swiss Steak makes a scrumptious main dish entree when served with cooked vegetables and a salad. Or a really hearty lunch served as an open-faced steak sandwich. It can be featured in stews and casseroles.

So try Loma Linda's new Swiss Steak with Gravy soon. It has the flavor of steak with none of the animal fat, preservatives or cholesterol. Which is why we say it's too good to be true.

Loma Linda Foods®
SINCE 1906