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MANUSCRIPTS: LIFE & HEALTH gives consideration to unsolicited manuscripts provided they meet certain requirements. Submissions can be up to six 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.

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A PERSONAL NOTE

Typesetter Charlene Shores at the V.D.T. (Visual Display Terminal).

Typesetters Marcia Harris, Carol Proctor, and Jerry Conley.

Proofreader Delma Miller (left) and Georgene Krenrich, supervisor of the proofroom, check Life & Health *pages.*

What a storm broke when the National Research Council's Food and Nutrition Board issued a report—*Toward Healthful Diets*—that cautioned the American public against overestimating the power of diet to prevent disease. The board addressed itself in particular to the question of cholesterol, and its suggestions regarding this were, as *The New York Times* put it, "a sharp departure from recent dietary recommendations" by other groups, including the American Heart Association, the U.S. Department of Agriculture, the U.S. Department of Health and Human Services, and the Senate Select Committee on Nutrition and Human Needs.

Among the charges and countercharges flowing between the groups who have spoken to this issue, the American public stands in some bewilderment. If the "experts" can't agree, how are John and Jane Doe supposed to know what diet is best? Dr. Leo Van Dolson makes some pertinent points regarding this cholesterol controversy. His article begins on page 6.

Author Joseph Portaro describes a method developed by researchers to predict whether a person is apt to contract certain chronic or malignant diseases of aging, such as heart disease, stroke, diabetes, and cancer. Some physicians think that this method soon will be used routinely when a person has a health checkup. In fact, it may be used with newborns, to predict what diseases they are predisposed to; then steps can be taken to try to prevent the predicted disease from occurring. You'll find the details on pages 8 and 9.

How do you separate the components of man—the physical, mental, spiritual, emotional, social? The answer is You can't, as more and more people seem to be realizing. These parts of man are so delicately intertwined that what affects one to any marked degree affects all. In a two-part interview by Ella Rydzewski, Richard Nies, a psychologist, discusses the effect that religion has on mental health. This month he speaks particularly about how to deal with reality (see page 12).

Another controversy that has swirled around our heads for years is the one concerning Laetrile. Regardless of which side of this controversy you are on, you should be interested to know that the National Cancer Institute, which is part of the U.S. Department of Health and Human Services, has begun clinical tests on cancer patients to determine the effectiveness of Laetrile in the treatment of their disease. For more on this research, turn to page 27.

It's time to meet some more of our publishing-house people who so faithfully each month work in some way on the preparation of LIFE & HEALTH.

After the copy for any given

Proofreaders Alan Martin, Arthur Ward, Larry Ware, Delight Sigilman, Edith Ackerman, Elizabeth Tucker, and Vesta Adams.

Leonard Wallace (left), foreman of photo-composing and systems manager, and Mewa Singh, assistant systems manager, trace cables to the input/output boards on the new digital 11/70 computer. These boards are used by the computer to "talk" to the operators' terminals.

month leaves the editor's office and has been checked by the copy editors, our designer, Howard Bullard, marks it for style and size of type. Then off it goes to the typesetters. These people painstakingly type away at their keyboards, transferring the articles into electronic data that the phototypesetting machine in the next room ultimately will put into visible type on photographic paper.

When they have finished typesetting the copy a computer line printout is sent to the proofreaders, who check it against the original manuscripts to make sure that nothing has been omitted or changed and to catch typing errors. The printout goes back to the typesetters for corrections, then one of the phototypesetting machines (a Linotron 202, for those of you who know about such things) spews out galleys.

Well, I won't take you back and forth on all the trips that galleys, then the dummy, then pages, then blue line, make to these people—who check, recheck, and rerecheck in an effort to catch any mistakes before it's forever too late. But I will say what a tremendous group of eagle-eyed proofreaders and patient typesetters we have, who so diligently do everything they can to help us put out an error-free magazine.

Mewa Singh is the Linotron and computer operator who makes those formidable machines do all the right things. He also stores our articles on disk packs so that if we want to retrieve any of them at a later date, we can. Equally important, he answers with a smile all my questions about what the machines do, and why, and how, but is kind enough not to laugh at my ignorance.

The foreman of photo-composing (the department that encompasses the typesetters and computer operator, among others) is Leonard Wallace, a mechanical genius who over the years has kept various machines running and, in fact, has time and again repaired the irreparable.

I'm thankful for all these people who work so hard to help make LIFE & HEALTH a quality magazine.

During this Thanksgiving Day month may you find much in your life for which to be grateful. We here at LIFE & HEALTH are thankful for you, our readers, for your interest in better health and a more abundant life, and for your support of our (which means your and our) magazine.

Happy holiday.

Joyce McClintock

DON'T BE FOOLED—CHOLESTEROL **DOES** COUNT

by Leo R. Van Dolson, Ph.D., M.P.H.

A cyclone of criticism has resulted from the release on May 28 of a report on the relationship of fat, cholesterol, and disease by the Food and Nutrition Board of the National Academy of Sciences.

The report, entitled *Toward Healthful Diets*,[1] takes a position contrary to that currently held by other health agencies. Those who wish to continue eating unlimited amounts of butter, eggs, and fatty meats have interpreted this new report wrongly as giving them carte blanche permission to continue doing so without fear of coronary heart attacks or excessive cholesterol deposits.

In fairness to the report, it must be noted that whereas its authors consider it "scientifically unsound to make single, all-inclusive recommendations to the public regarding intakes of energy, protein, fat, cholesterol, carbohydrate, fiber, and sodium,"[2] they do admit that for people at high risk or who are having problems such as obesity, hypertension, and diabetes, a reduced consumption of foods such as alcohol, sugars, fats, oils, and a decrease in use of salt is highly desirable.

The board also takes the position that "it appears . . . that although high serum cholesterol and LDL [low-density lipoprotein] levels are positive risk factors for coronary heart disease, it has not been proven that lowering these levels by dietary intervention will consistently affect the rate of new coronary events."[3] They do suggest, though, that "in our present state of knowledge, sound medical and public health practice should be aimed at reducing the known risk factors to the extent possible."[4]

A Washington *Post* editorial insisted that the report had "increased public confusion over proper diet" and "soiled the reputation both of the board and of the academy for rendering careful scientific advice." That same week a *New York Times* editorial said that the report "is so one-sided that it makes a dubious guide to national nutrition policies."

Typical of the many adverse reactions was the statement of Dr. Robert Devetski, a professor of medicine at Rush Medical College in Chicago, published in the South Bend (Indiana) *Tribune* of June 9. "When those of us in the practice of medicine . . . have noted over periods of ten to fifteen years, both here and at adjacent medical centers and in discussions with colleagues throughout the country, a positive 'diet and disease' correlation and further, in the presence of a statistically significant, and objectively documented, incidence of accelerated heart and blood vessel disease, it becomes quite difficult to silently ignore proclamations ex cathedra, by a group of scientists from the Food and Nutrition Board. . . . The implied negative existence of a relationship between 'diet and disease' creates an unfortunate and tenuous situation. For, as they were aware, the results of six elaborate (five- to twelve-year) prospective studies, considering all of the stress factors, will be available during the period of August, 1980, to June, 1981."

Donald M. Berwick, of the Harvard School of Public Health, is quoted in the June 9, 1980, issue of *Time* magazine as saying, "The council is not acting in the best interests of the American people." Critics point out that at least five members of the fifteen-member board have direct links with the food industry. Robert E. Olson, of St. Louis University Medical School, who served as chairman of a six-member task force that did most of the research and drafted the report, admits that he has been a paid consultant to the egg industry but calls media reports that indicate a conflict-of-interest situation "despicable slander." Alfred E. Harper, of the University of Wisconsin, is chairman of the Food and Nutrition Board that prepared the report. He denies that his interpretations were biased because of his being a food-industry consultant, primarily with Pillsbury and Kraft.

The report makes quite a bit out of the evidence that "Americans have never been healthier," pointing out that the mortality rate for heart disease declined 20 percent during the past twenty years and is currently falling at the rate of 2 percent per year.

Alice Marsh, Sc.D., R.D., professor emeritus of home economics at Andrews University, responds to this statement by suggesting that what the writers of the report seem to overlook is that doubtless the reason Americans are healthier is that these mortality rates reflect the result of a strong health-education emphasis on

Leo R. Van Dolson is associate editor of the *Adventist Review* and a former editor of LIFE & HEALTH. He is also a health educator, with a degree in public health.

exercise and proper diet that has resulted in a change of American life style and eating habits. Americans have cut down substantially on the amounts of saturated fat and sugar in their diet.

Much research favors low-fat diet

The American Heart Association, heart specialists, and health educators have strongly criticized the Food and Nutrition Board's interpretation of existing data, reporting that much research indicates a low-fat diet can be effective. According to Dr. John A. Scharffenberg, director of community health education at San Joaquin Community Hospital in Bakersfield, California, eighteen international scientific committees agree that cholesterol and saturated fat should be reduced in the diets of Western or industrialized nations. Such conclusions are based on animal studies, well-controlled metabolic studies, epidemiological studies, and a number of clinical trials. Populations that have diets rich in saturated fats have a higher level of cholesterol in the blood and a greater incidence of coronary disease. Yet the Food and Nutrition Board does not accept these statistical and epidemiological studies as being conclusive proof. Strangely though, they do accept similar studies for linking obesity with both heart disease and cancer in the same report.[5]

These conflicting reports and positions on the part of leading nutritionists confuse people, Dr. Marsh suggests. Adequate evidence exists that many

PHOTO BY VERNON TOOLEY III

Americans, if not most, are ingesting too much cholesterol and hard fat and are not considering the ratio of polyunsaturated to saturated fats in their diet. The American diet seems to be highly weighted on the side of too much saturated fat. She believes that there is longtime evidence that fatty acids should be kept closely to a one-to-one ratio—that is, one gram of saturated fatty acids to one gram of polyunsaturated fatty acids. (See the table below for examples of foods that are either high or low in saturated fats.) Dr. Marsh suggests that the current problems people are having with the use of polyunsaturated fat are the result of their having gone too completely in that direction and their not keeping a proper balance.

Dr. Marsh would eliminate practically all cream and even full-fat milk from the adult diet in favor of low-fat milk. She recommends that more fruits and vegetables be eaten. Fresh fruits are the best desserts, she says, suggesting that no one can improve on a banana, an orange, or a papaya by mixing it with fats and sugars. Learning to use fresh fruits would help considerably to solve the problem of too much fat in the diet. Dr. Marsh also recommends using whole grains and thus eating more fiber. She says that the fiber that helps people the most is grain fiber. Fruit and vegetable fibers are as good, as far as the hygiene of the intestinal tract is concerned, but when it comes to getting adequate bulk, whole-grain fiber is needed.

Two basic questions in the controversy

Because both sides in the cholesterol controversy recognize that people with high serum cholesterol should attempt to lower it by all means possible, including dietary restrictions, Dr. John Scharffenberg concludes that the basic disagreement focuses on two points: (1) whether the whole population should change its diet, or just those at high risk of heart attack, and (2) what cholesterol level in the blood would be considered high enough to require a special diet.

He adds that physicians cannot possibly identify all those in need of help or at high risk, and he points out that the average American with a 210 mg. percent total cholesterol level is at four times greater risk of heart attack than are the people who live in Japan, where the average is 180 mg. percent.

He resolves the problem by suggesting that if people were given a chance to understand the data on both sides, they would certainly choose low-fat, high-fiber diets. He feels that prudent persons should not be swayed by arguments that seem to be biased toward food-industry positions any more than tobacco consumers should be swayed by research sponsored by the tobacco industry. &

FATS IN SELECTED FOODS

High in Saturated Fats—High Cholesterol	Low in Saturated Fats—Low Cholesterol	Little or No Cholesterol
eggs	safflower oil	fruits
meats	soybean oil	vegetables
whole milk	corn oil	grains
butter	peanut oil	
cheese	sunflower seeds	
cream	walnuts	
chocolate	wheat germ	
coconut	soft margarines	
hardened fats—Crisco, margarines	fish	

REFERENCES

[1] Food and Nutrition Board, *Toward Healthful Diets* (Washington, D.C.: National Academy of Sciences, 1980).
[2] *Ibid.*, p. 4.
[3] *Ibid.*, p. 10.
[4] *Ibid.*, p. 9.
[5] *Ibid.*, pp. 6-9.

HLA TYPING- AN EXCITING DISCOVERY

Now it is possible to tell who is susceptible to what disease.

by Joseph K. Portaro, Dr.P.H.

Have you ever wondered about the possibility of your contracting a specific disease, thinking that if you knew that such a possibility strongly existed you could take steps to prevent or postpone it? Well, you are not alone. Ever since the great plagues, medical scientists have been searching for tests to detect disease susceptibility.

At last these efforts have been rewarded. Researchers have recently developed a new medical tool—called HLA typing—that has proved capable of predicting susceptibility to several chronic and malignant disorders. Now there appears to be a way to answer the question: What diseases am I susceptible to, Doctor?

HLA typing is a laboratory test that detects a person's HLA tissue type, a biological characteristic determined by a group of proteins called human leucocyte antigens, or HLA proteins. Although the HLA proteins were first discovered on leucocytes (white blood cells), it is now known that eight to ten of these proteins are found on all body cells with a nucleus, and that they are produced by genes located on the sixth human chromosome.

To date, almost eighty different HLA antigens have been discovered, and genetic studies using HLA tissue typing have shown that virtually everyone except identical twins has a unique mixture of HLA antigens on their cells and thus has a unique HLA tissue type. Strangers can have one or more of the HLA proteins in common, but their overall HLA pattern is usually different.

HLA tissue type was initially discovered by scientists seeking to explain why body organs such as kidneys could not be exchanged between individuals without rejection. These studies revealed that differences in HLA antigens between donor and recipient caused this rejection phenomenon by triggering a killer response by the body's immune system, and that only persons with a nearly identical HLA tissue type could exchange organs successfully. This finding—made initially in 1956—revolutionized the field of transplantation medicine, and today HLA typing is performed routinely as the first step in selecting a donor for individuals requiring organ-transplant therapy.

Recently another discovery was made regarding HLA tissue type. Scientists found that patients with certain diseases shared specific HLA antigens in common. This finding suggests that the genes that produce HLA antigens or the HLA antigens themselves cause disease susceptibility. However, this hypothesis has not been verified yet. In addition, it was suggested that HLA proteins were indicators of disease susceptibility, and that HLA typing could be used to predict a given undiseased individual's clinical future. This application of HLA typing has been verified extensively over the past few years, and it is now clear that the use of HLA typing as a predictive tool will soon revolutionize the practice of preventive medicine.

First discovery

The first disease associated with an HLA antigen was a form of arthritis known as ankylosing spondylitis, which malforms the spine of its victims so badly that they literally take on the appearance of a question mark. In 1973 it was found that nearly 100 percent of the patients with this disease were positive for the HLA tissue type known as B27.

As pointed out by Dr. William Braun in his excellent treatise *HLA and Disease*, the B27 finding was followed by a flood of other discoveries relating HLA tissue type to disease susceptibility. According to the available data:

- If you are type B13 or B17, you are approximately five times more likely than are others to develop psoriasis and other skin diseases in your lifetime.
- The B8 tissue-type person is up to four times more susceptible to lethal autoimmune diseases such as chronic active hepatitis, and endocrine disorders such as diabetes and thyroid failure, and may develop an allergic intestinal disorder called celiac disease, which is triggered by the gluten in wheat products.
- Rubella and herpes infection, according to several studies, are

Joseph K. Portaro is director of immunology for Upjohn-Laboratory Procedures, Inc., in Woodland Hills, California. He holds the Doctor of Public Health degree.

more likely to victimize HLA type A1 persons.

- The Bw21 individual is more susceptible to coronary artery disease.
- Cervical cancer could be in the B15 woman's future.
- Types B12 and B18 are predisposed to essential hypertension and migraine headaches.
- The Dw2 type is a prime candidate for the neurological disease multiple sclerosis.

Some evidence exists that suggests that your HLA type may indicate how fast you will age and whether you are predestined to develop schizophrenia, manic depression, or senility, but the data is still preliminary and as yet no one is taking a firm stand.

The list goes on and on—some forty rare and common diseases have been related to HLA tissue type—but these few examples should be sufficient to make the point that your HLA type may forecast your disease future.

HLA typing will become routine

Soon, according to Dr. Braun and other experts in the field of immunogenetics, HLA typing will become a routine part of everyone's health workup. People will be typed at birth, and based on their HLA type a prediction will be made as to what diseases they are predisposed. After this assessment, a personalized medical program will be designed to help prevent a forecast disease from occurring.

For example, if a woman were found to be type B15, she would be considered predisposed to cervical cancer and would be placed on a medical program that stresses frequent Pap smears. The Pap test can detect cervical carcinoma early when it is curable by radiation and surgery, and when applied specifically—as in this case—rather than randomly, the ability of the Pap test to detect cancer early is increased significantly.

A medical program including a low-cholesterol diet, regular aerobic exercise, and avoidance of smoking would be designed for B12 men and women to offset their predisposition to coronary artery disease and premature death caused by heart failure.

Dietary manipulation is also effective in preventing diabetes and autoimmune disease, and a medical defense strategy emphasizing dietary control would be recommended for type B8 persons, because they may be susceptible to these conditions.

HLA typing is presently being used by rheumatologists throughout the country to help prevent and control the spinal disease ankylosing spondylitis by identifying the B27 positive susceptibles in families of known patients and prescribing exercise regimens helpful in preventing or lessening spinal malformation.

HLA typing is not the only genetic tool for detecting disease susceptibility, but it is the first for diseases of aging such as heart disease, cancer, stroke, and diabetes. These chronic and malignant disorders account for 80 percent of all deaths in industrialized societies, and their prevention is the key to human longevity. HLA typing will certainly facilitate their control as a probe that can answer the question Who is susceptible to what disease? &

BIBLIOGRAPHY

Bodmer, W. F. (scientific editor). "The HLA System." *British Medical Bulletin* 34(3): 213-324, 1978.

Braun, William E. *HLA and Disease: A Comprehensive Review.* Boca Raton, Florida: CRC Press, Inc., 1979, pp. 1-137.

Calin, Andrei. "The Relationship Between Genetics and Environment in the Pathogenesis of Rheumatic Diseases." *Western Journal of Medicine* 131: 205-218, 1979.

PHOTO BY WILLIAM CLENDANIEL

Older people make delightful friends

by Shirley M. Dever

Not too long ago I never would have believed that I'd be having such inspiring and downright interesting experiences, but now I'm completely sold on a surprisingly delightful avocation —visiting the residents of a conva-

Shirley M. Dever, a free-lance writer, lives in the beautiful San Juan Islands off the northwest coast of the State of Washington. She has sold approximately 1,250 articles to health and religious magazines and writes regularly for her island's newspaper. She and her husband are active in their community church.

lescent home. When I first was nudged into visiting these people in chairs, beds, or wheelchairs, I found that many of them are as clear and rational as I am.

I started out by taping their reminiscences of the early days in the idyllic islands where we live. Truthfully, the first day I made the trip over there I went because I believed it would be a one-time thing. The Lord, however, had some very different plans for me—plans that reached out farther than writing these persons' stories.

Before I left the 98-year-old man who has the most remarkably accurate memory of anyone I've known, he squeezed my hand. Then his eyes searched mine.

"Come back to see me soon," he pleaded. "You make me feel good." My heart did flip-flops, and I heard my voice say, "I will." And the next week I was right back there to see dear old Al.

A friend who visits in the convalescent center each week offered me a ride. How could I refuse? It was summer, and we basked together in the warm sun as we rode the old ferry *Vashon* back and forth.

A wealthy lady I began to visit offered to pay my way. Of course, I could not accept her kind and generous offer, but this proved to me the desperate need of older people to know someone, somewhere, who sometimes cares enough to visit them and who will take time to listen to them. They needed just one someone to light up their lives occasionally. I wanted to be that someone.

On his birthday I took Al a giant-print Bible. He promised to read it faithfully every single day. Last time I saw Al he hung his head in shame.

"I've read the Bible each day but today—the day you came to see me!" he confessed.

"You can read it while I'm here, or after I leave," I suggested. "Today is not over yet."

Inwardly, I gasped in amazement. Al had surprised me. I never dreamed he'd have such a good batting average on Bible reading and study.

Meanwhile, the article I wrote about Al for his birthday graced a full page in our local paper, complete with his picture. I noticed the tear sheet proudly and prominently displayed on a big bulletin board in the hall near Al's room.

A woman who had been reluctant to talk to me saw the article about Al. Suddenly she wished to see me. Phyllis had led an adventurous and active life, and she asked me to write about it. Before long we not only taped her story at the center but we also talked back and forth during long-distance telephone calls—which she insisted upon paying for. For weeks she called me early each morning for a little chat. How could I not promise to continue seeing her?

They need to know that someone, somewhere, cares enough to visit them and to listen.

The following January a feature article appeared in our local paper about Phyllis and her late husband and the uniquely adventurous life they had known together. Phyllis mailed copies of this issue to everyone she could think of.

Phyllis, who is in her 90's, is now one of my very best woman friends.

Becoming friends

I have to confess my twofold purpose in visiting these interesting older folks. I wish to get their fascinating stories recorded on tape or on paper, but I also want to be their close friend. They have much to share in wit and wisdom and wonder for those of us who are younger than they are. Now I know why Oriental people value their aged so much. Ignoring older people is a way to miss out on a vast reservoir of untapped experiential history.

One woman I visit sits in her little wooden rocker and tells me she is merely waiting for the Lord to take her. She's a Christian, and she's been one all her life. I don't need to witness to her. But she does need my companionship. She needs warm and responsive love even more than do most residents in this convalescent home.

Across the corridor I stop by to see a retired nurse. Elsie is an invalid now, but she's a joy to talk to. She's no stranger to suffering, but I marvel at the sweet expression on her face. Some of our island people still recall how Elsie nursed them back to good health years ago, and I try to remind her of the love they still have for her. As she reviews her past life of community service, the years seem to roll slowly off her shoulders, and for a while she feels young and useful again.

Edith, in contrast, is a spunky, fun-loving lady. We go on long walks together, because she is afraid to go alone. "My steps aren't sure enough," she tells me, "and I need to lean upon you."

Although she is 87 years old, Edith still writes a monthly news column for an island newspaper.

Her roommate has a severe hearing problem, but at the age of 94 she is still blessed with a peaches-and-cream complexion. She ran a big business in Seattle years ago. Today she is apt to come up with an intelligent or chipper remark when it is least expected.

Sometimes I eat dinner with my older friends. I must keep in mind that their eyesight is dim, their hearing impaired, and their hands shaky. If a forkful of food lands on the table or the floor, it is my place to keep smiling and talking to them and to hardly notice at all.

"You've got another ministry besides your writing these days," one of the more observant women told me. Somehow I hadn't thought about my visits to the convalescent center as a ministry at all. Praying my way through every visit, I lean upon the Lord. What I had thought would be too difficult is almost easy with His help. He helps me tolerate disagreeable odors (they are there even though the help keeps the place as clean as possible). He has given me patience that on my own I lack so painfully. And He is giving me peace of heart and mind so that each visit has become more enjoyable.

I guess, in a way, visiting these older folks is a ministry, but I find it a consuming, challenging, and charming form of service for the Lord.

It still amazes me, but these days with my older friends are fast becoming some of the best days of my life!

RELIGION AND MENTAL HEALTH
DEALING WITH REALITY – Part 1

An interview with a psychologist

by Ella M. Rydzewski

This past February, LIFE & HEALTH interviewed Clinical Psychologist Richard Nies at his office in Glendale, California. Dr. Nies has studied not only psychology but religion, as well. He received his B.A. degree with majors in religion and chemistry from Loma Linda University in California, and an M.A. degree in Biblical languages from Andrews University in Michigan, and completed two years' additional graduate work in theology toward a Th.D. He received his Ph.D. in experimental psychology at the University of California at Los Angeles, and the equivalent of a second Ph.D. in clinical psychology, also at U.C.L.A. He is well-known as a public speaker, has taught both psychology and religion, and has had research papers published in various professional journals. He has recently been joined in practice by his son, Douglas.

In Part I of the interview Dr. Nies tells how a Christian psychologist uses religion in his practice and why it is important for mental health. He speaks especially of the value of the Christian philosophy in developing the concept of the whole person as a worthwhile individual.

Richard Nies

Dr. Nies, why do you incorporate religious philosophy into your practice of clinical psychology?

The approach of religious and psychological merging in mental health is one that is largely neglected by most professionals in the field. My belief is that it has implications for everyday living that can bring about change. It means looking at life through objective reality that has nothing to do with our changing moods, rather than subjectively monitoring it through our feelings.

First of all, we have to know what reality is. I assert that most people in my profession are not aware of ultimate reality. That is why they are so hung up on personality theories. We need to ask, What is life all about? What is a person supposed to look like when we get through with him? Without that, we can't even come to grips with abnormality.

Now, as a Christian I take seriously that we are made in the image of God, and we learn to reflect that image. That is putting it in religious terms—being like God; learning your potential. That is a tremendous concept that we need to explore. If that is true, then it means you can't even know yourself if you don't know God.

I see people who run the whole gamut of emotions—anxiety, depression, guilt, feelings of worthlessness. For example, in a true depression a person will usually feel hopeless, helpless, and worthless. This feeling can become very intense, to the point that the person becomes suicidal. It is very difficult for people not to accept as valid these strong emotions that they have. The feelings become so demanding that for all practical purposes they become reality.

Now let's take this depression—hopeless, helpless, and worthless. What is reality? What is objectively so—if we only knew it? God loves us. We have a guaranteed future. He will empower us to face any situation—even death. We are never alone, and we are worth so much that if, for instance, either He or I would have the only option for eternal life, He would defer to me. That has got to say something about our worth. So the fact is that I am not hopeless—just the opposite is true.

Jesus Himself suffered one of the most intense depressions in Gethsemane and on the cross. The worst thing that can ever happen is to be abandoned and have no one love you—to feel that you are not important to anyone. Although God was right there at the cross, Jesus felt that His Father had left Him. He chose, however, to act on the evidences of His Father's love heretofore revealed. He made a distinction between sources of reality.

Is reality anchored in God and His Word, or in our feelings? In fact, the nature of all temptation is this conflict between what is true and will have the best consequence, and what we feel for the moment. It is interesting that Jesus displayed this most intense struggle between the objective and subjective—whether God is the source of reality or whether it is generated in terms of our own biochemistry. When confronted with that issue, He followed the agonizing cry "Where have You gone—You have abandoned me!" with "Father, into thy hands I commend my spirit." In other words, I am going to trust You even though I can't feel You.

How do you use this idea in your practice?

I have developed a practical system for integrating this concept into my practice. First of all, there are three steps in working out mental health with this philosophy. The first basic step is knowing what the truth is—that I am worthwhile. We are familiar with the statement "You shall know the truth, and the truth shall make you free." Freedom from what? Freedom from the demands and the constraints of our disruptive emotions. No one is free if he is incarcerated in his strongest emotions. We act out our low self-esteem. For instance, when you ask people why they do a certain thing they will say, "Well, I feel like it. I feel so worthless—I feel like a crumb."

Don't some religions teach this sort of thing?

Yes, a lot of religious systems have made us feel like worms.

Then religion can sometimes be a hindrance to mental health?

Yes, the way it is often presented. A lot of our conceptions of God represent gross distortions of Scripture.

With friends like that, God doesn't need enemies.

Now, we can know the truth only relatively, through our own capacity, so it's an approximate perception of truth that we are talking about. I have got to have some objective awareness of what is real, apart from my changing biochemistry. To make a statement such as "It is raining" ought not to be referenced by how I feel about it. It ought to be referenced as to whether or not it is raining. So reality, then, is basically anchored in phenomena that are outside of me. Once I have some perception of reality, then I am ready for the next step.

The second step is that I must recognize that I am being harassed constantly by oppressive emotions that tell me I am not worthwhile. Part of it is my genetic code. The majority of it is my learning. For instance, if you grow up in a home where you are told that you are not worth much and are treated that way, it will begin to stick. Eventually you will act out those expectations. You may stay away from people, or you may try to overcompensate by excelling in something. You see, our basic need is to be somebody—to be worthwhile. And, of course, the good news is that we are.

The struggle comes out when there is a discrepancy between what is true in reality and my feelings about myself. If my environment becomes overly intimidating, and somewhere along the line I have felt that it has helped to lash out, I will have learned to lash out. Or if I have been punished for lashing out, I might withdraw. I can even become schizoid and go into my own little dream world where life is not so intimidating. I can develop delusions. There are all kinds of extremes, but each person is seeking to feel as though he is somebody. Now if I know that someone loves me, and there is hope for me, and I can make a distinction between what is true and the way I feel, I am ready for the third point.

The third step is a function of the will. I can choose to act on reality, with God's help, even when I don't feel like it. It is a psychological law that if I act a certain way and think a certain way long enough, my emotions will begin to buttress the way I am thinking and behaving. There are many implications in getting your emotions in line. But as long as we live in this world, we are going to get tired, get viruses, feel horrible at times, and if you have no anchor

point in reality, and no basis for knowing what is truth, then you are going to be stuck with your strongest emotion.

You have noted that there is a choice. Many people have been led to believe that their background dictates they will be a certain way and cannot change. Isn't it rare to see a real change?

The fact is that just at the human level many people can't change—these habits become so entrenched. But you know that with Christ we can overcome hereditary and cultivated tendencies.

Is there a limit, though, that an individual just can't go beyond?

Yes, in some respects, but not morally. Our hope is in a moral hope, basically. For instance, my genetic code precludes my playing center for the Los Angeles Lakers. But in terms of being trusting, of being loving—you can be all these things in spite of other limitations.

But loving is learned too, isn't it?

It's learned and it's given. You see, human love says, I'll scratch your back if you scratch my back. And that's OK as far as it goes. But what if a situation changes and I don't need anything from you, but you are in need? Christianity says, I will be willing to help even though I don't feel like it, because I see worth in you. God gives us the insight, motivation, and power to be loving even when we don't feel like it. And ultimately, all things being equal, it is also the best way to develop positive feelings.

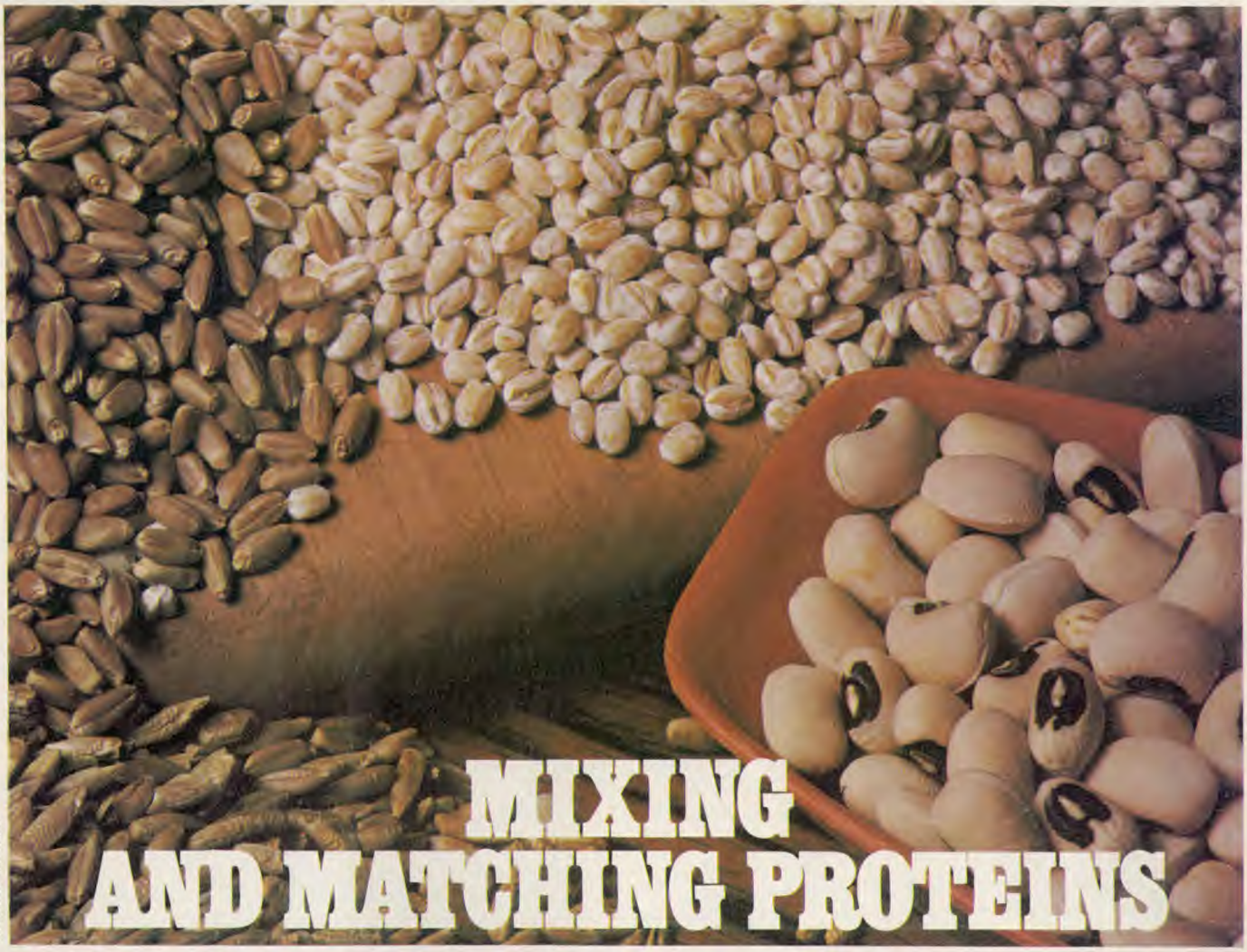
How do you deal with patients who are obviously not religious?

I use a different vocabulary. I have an advantage in that most people come to me feeling a lack and are willing to learn. One of the basic realities they will accept is that the deepest need is to be loved—to be somebody. No one has ever argued with me about that. It is especially poignant to observe people who feel like nothing, who have lost their hope, and who are scrambling around trying to find their place in the sun. It is not difficult to point out to them that if you can't give love, you can't receive it. If you are totally preoccupied with yourself—your anxiety, your depression, your guilt, your fear, your animosity, your hostility—your life shrinks, and you become very defensive about yourself. This blocks out the very thing that you need.

For instance, take paranoia, which we all experience to some degree from time to time—self-protection. If I am very insecure, then I have to worry about your hurting me. Everything becomes a potential threat. You could be the kindest soul in the world, but I will be wondering what your game is and will not receive what you are trying to give. The very thing I need to heal me, I prevent from happening. So when I get people to see this, I talk to them about what they can do. In a sense I function as God to people who do not know anything about Him or who are not interested in Him. All I can do is discuss with them the alternatives and how they can start moving in another direction. They must make the choice. Part of my being able to do anything with them is that they trust me; if they didn't, we couldn't get anywhere.

As a Christian I have a real opportunity to share what I have gained. People are hurting, and they will listen. For instance, I give my experience. I tell them I had to hit bottom personally before I was interested in any alternative way of living. It's like some marriage problems. Some of the greatest marriages I have seen have sprung from when the couple hit bottom. Sometimes mediocrity in life or in a marriage can go on for a long time, and it is more destructive than if the bottom drops out.

The interview with Dr. Nies will conclude next month, when he will give examples of practical things he has people do to help them overcome their problems.



PHOTOS BY SKIP BAKER

MIXING AND MATCHING PROTEINS

by Geraldine Border, M.S., R.D.

In this era of increased interest in the role that diet plays in promoting good health, many persons have questioned whether adequate protein can be supplied by a diet consisting of grains, legumes, nuts, seeds, fruits, and vegetables. They are relieved to learn that, indeed, plant proteins can be mixed and matched to provide combinations of amino acids that have high biological value.

Geraldine Border is chief clinical dietitian at Portland Adventist Medical Center in Oregon. She has taught foods and nutrition at Walla Walla College in Washington and has served as director of dietary services at Walla Walla General Hospital. She is the current president of the Seventh-day Adventist Dietetic Association.

The plant proteins that especially complement each other are grains and legumes. The complementary action occurs, because the amino acids that are abundantly present in legumes are the amino acids that are lacking or insufficient in grains; and grains have amino acids that are sparsely supplied in the legumes. When grains and legumes are eaten together at the same meal, each complements the other to provide protein that is of high biological value.

A simple rule of thumb for remembering the ratio of grains to legumes that applies to most combinations of plant proteins is: *three of grains to one of legumes.* The rule can be used for mixing any grains with any beans, although they do not have exactly the same amino-acid makeup. A story from Haiti illustrates the easy mix-and-match rule for combining legumes and grains.

A number of years ago thousands of Haitian children were victims of kwashiorkor, a protein-deficiency disease. The mortality rate for children under 4 years of age was approximately 50 percent. This unfortunate condition existed because babies, after being weaned from their mother's milk, were fed only starchy food. Without protein in their diet, the little children soon became ill, and many died from undernourishment.

In their search for protein-rich foods available to the poverty-stricken multitudes of Haiti, nutri-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tionists discovered that grains and legumes could be combined to make an excellent food for children. To teach the formula to the families of Haiti in a practical way was a challenge. At the time the illiteracy rate was high, and the people did not have radios or television.

The mix-and-match rule

The Minister of Health of Haiti established a system of Mother Craft Centers throughout the rural areas and instructional centers in Port-au-Prince. Native workers were trained to go out into the Mother Craft Centers to teach the parents how to make the lifesaving formula for their babies and little children. Instructors taught the families to take a hollowed-out log and throw into it *three handfuls of grain* and *one handful of beans,* and then to grind them into a fine flour. The flour was cooked into a thin mush and fed to the children. The combination of grains and legumes provided the protein equivalent of milk, and when the children were fed the formula they were healthy. As a result, kwashiorkor was essentially eradicated from Haiti.

Millions of people in many countries have been well nourished by using grains and legumes as the main sources of protein in their meals. In the Orient, rice is a basic food. To complement rice, the Orientals have used the soybean, which has a high-protein content. Black beans and rice are favorite foods in several South American countries. Corn and beans are regular fare on south-of-the-border menus. Mideastern recipes often combine lentils or garbanzos with bulgur, a type of wheat. Many of the recipes from these countries have become favorites among vegetarian cooks in North America who enjoy cooking with natural foods. Entrees and soups containing legumes may be special enough for buffets or home-style meals in any season. Soup and salad served with a variety of breads make a delicious meal and provide excellent protein.

So, experiment with mixing and matching your grains and legumes, and know that in the process you are getting high-quality protein in your diet.

RECIPES

Tabbouleh (Bulgur Salad)

- 2 cups fine bulgur
- ½ cup chopped green onions
- ½ cup chopped cucumber
- 1 tomato, chopped coarsely
- ½ cup chopped parsley
- ¼ cup chopped fresh mint leaves (or 2 Tbsp. dried mint leaves)
- 4 Tbsp. olive oil
- 6 Tbsp. lemon juice
- 1 tsp. salt
- Cherry tomatoes for garnish

1. Soak the bulgur in ½ cup cold water for about ½ hour.
2. Squeeze out any excess water from the bulgur before mixing in the other ingredients.
3. Stir all ingredients together and refrigerate to blend flavors.
4. Line a bowl with romaine lettuce and pile the salad into the bowl.
5. Garnish with cherry tomatoes.

Yield: 6 servings.

Note: Garbanzo patties are a good complement to this salad.

Falafel (Garbanzo Patties)

- 1 medium onion, chopped fine
- 1 Tbsp. oil
- 1 cup mashed potatoes
- 1 bunch parsley, minced
- 3 cups cooked, mashed garbanzo beans
- ½ tsp. salt
- 1 Tbsp. lemon juice
- 1 tsp. ground cumin
- 1 tsp. paprika

1. Sauté the onion in the oil until transparent.
2. Mix all the ingredients together and shape into patties, using 2 tablespoonfuls per patty.
3. Place on greased baking sheet

and bake at 350°F. for about 15 to 20 minutes.

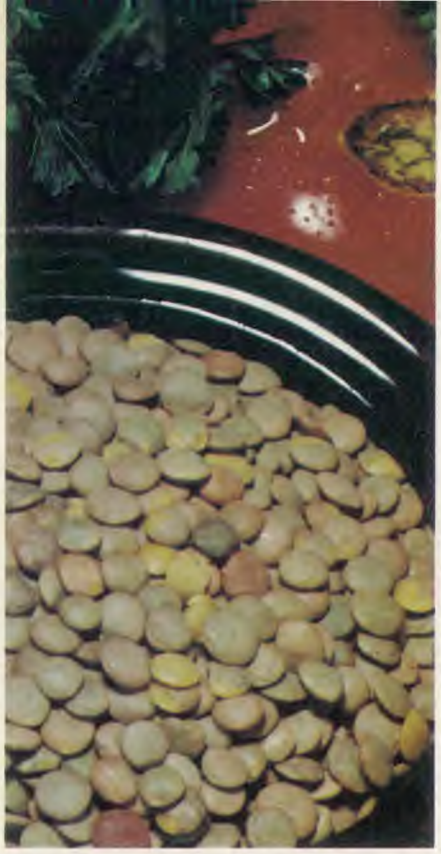
Yield: Approximately 20 patties.

Note: These patties may be served as a complement to Tabbouleh, or as a filling for pita bread.

Pita Bread

1 package dried yeast
1¼ cups (approximately) warm water
1 tsp. sugar
3½ cups all-purpose flour
½ tsp. salt
1 Tbsp. oil

1. Dissolve the yeast in ½ cup warm (not hot) water.
2. Add 1 teaspoon sugar to help the yeast activity.
3. Let the yeast mixture get bubbly before adding it to the flour.
4. Sift flour and salt together. Place into a warm bowl for mixing.
5. Add the oil to the flour.
6. Make a well in the center of the flour, and pour in the dissolved yeast.
7. Add as much of the remaining water as is needed to make a firm dough.
8. Turn out the dough onto a lightly floured board and knead until the dough is smooth and elastic, no longer sticking to fingers. This takes 10 to 15 minutes.
9. Lightly oil a large bowl, then roll the dough ball around in the oiled bowl to lightly cover the dough ball with oil. (This prevents the dough from drying out while rising.)
10. Cover the bowl with a warm, damp cloth, and let the dough rise in a warm place until the dough doubles in size.
11. Punch down the dough and knead it lightly; then divide it into balls about the size of a small orange.
12. Let the dough balls rest on a floured cloth or wax paper for about 5 minutes to relax the dough.
13. Preheat the oven to 450°F.
14. Roll out each dough ball into a circle ½ inch thick.
15. Sprinkle each circle with flour and cover with a sheet of wax paper.
16. Heat two baking sheets that have been sprayed with Pam, or greased lightly, in the oven until very hot.



17. Quickly lay out the circles of dough on the baking sheets and lightly brush each circle with cold water, then place in the oven to bake.
18. Pitas will puff up, forming pockets. They should be properly baked, soft, and not browned, in 6 to 8 minutes.
19. Remove pitas from baking sheets and cool on wire racks.

Yield: Approximately 10 pitas.

Black Beans and Rice

1 cup black beans, soaked in cold water overnight and drained
3 cups water
2 Tbsp. oil
1 medium onion, chopped fine
1 clove garlic, minced
1 small green pepper, seeded and chopped
1 large tomato, chopped
½ tsp. ground cumin
1 Tbsp. lemon juice
1 tsp. salt
1 cup long-grain rice

1. Cook the soaked beans in the water for an hour, or until just tender.
2. Sauté the onion, garlic, pepper, and tomato in oil for about 3 minutes.
3. Add the sautéed mixture and cumin to the beans, cover, and cook on low heat for another 20 to 30 minutes.
4. Add the lemon juice just before serving.
5. Cook the rice in slightly salted water until fluffy and dry.
6. Serve the beans and rice in separate bowls, family style, or for a buffet.

Yield: 4 to 6 servings.

Greek Lentil Soup

2 cups uncooked lentils, rinsed
8 cups water
½ cup chopped onion
1 small carrot, diced
1 medium potato, diced
2 Tbsp. chickenlike seasoning
1 tsp. salt
2 Tbsp. oil
2 bay leaves (remove before serving)
1 celery stalk, diced or sliced
1 Tbsp. lemon juice

1. Simmer all ingredients together, except celery and lemon juice, about 30 minutes.
2. Add the celery and cook another ten minutes.
3. Add lemon juice just before serving.
4. An optional ingredient in this soup is a chopped tomato.

Yield: 6 servings.

Quick Garbanzo Stew

1 medium onion, chopped fine
1 Tbsp. oil
3 cups hot water
3 cups (approximately) Chinese crisp noodles
2 cups (approximately) cooked garbanzos (For a meal in a hurry, use canned garbanzos.)
1 can mushroom soup
1 Tbsp. chickenlike seasoning
½-1 cup diced white soyameat

1. Sauté onion in oil.
2. Place sautéed onion and all other ingredients in a kettle.
3. Simmer for about 10 minutes.
4. Serve as a one-dish main meal, accompanied by a tossed salad.

Yield: 6 serving.

Note: Exact measurements are not important in this recipe. More or less of any ingredient may be used. A scrambled egg may be added, if desired. If a thinner stew is desired add more water, or milk may be used. Chopped celery may be added. The texture and flavor are good in this stew.

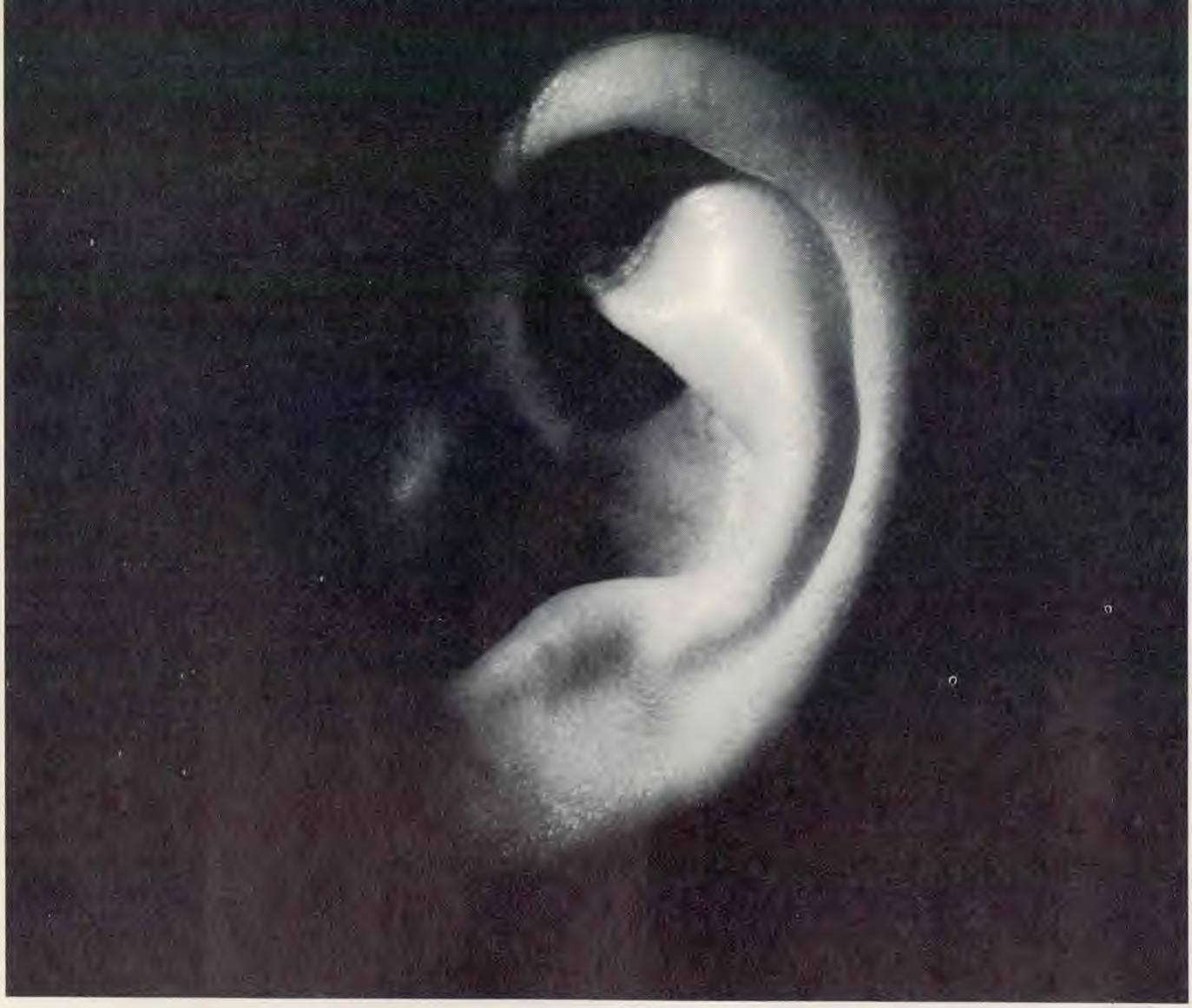


PHOTO BY J. BYRON LOGAN

What parents should know about middle-ear infections

by Richard V. Dunning

"But I *do* pay attention in school!" Barry cried. He had just brought home a report card on which his teacher noted that, although he was bright, he was also inattentive and didn't follow directions.

Mrs. Miller realized that she was being somewhat harsh with her 8-year-old, but his low marks were such a disappointment compared with last year's promising grades. Perhaps Dr. Lee, the family's physician, could shed some light on his inexplicably poor school

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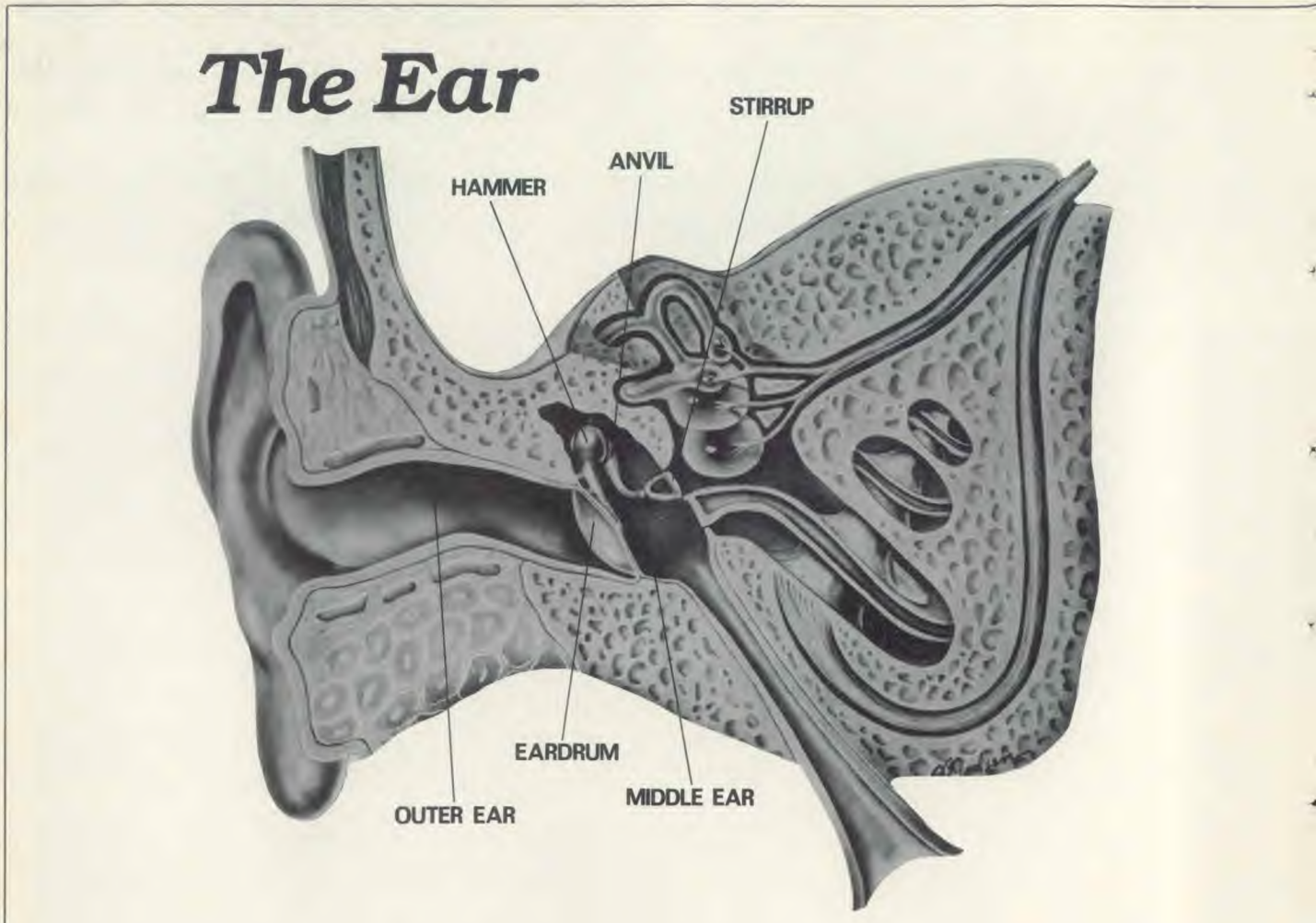
Richard V. Dunning has worked with the New Jersey Commission for the Blind and Visually Impaired for the past nine years. He works with blind and visually impaired children and their teachers in a program that enables the children to attend regular public school classes. His wife, Cassandra, provided considerable guidance in the writing of this article. She received her M.D. degree in May from Rutgers Medical School and is currently in a family-practice residency program.



performance. She had already made an appointment for the following afternoon, because Barry had been complaining of popping noises in his ears.

Dr. Lee's examination revealed that Barry had a middle-ear infection. He prescribed a decongestant and ampicillin, a type of penicillin that can be taken orally.

"When Barry's infection clears up I'd like to see him again," Dr. Lee said. "From the scarring on his eardrum I'd suspect he's had previous ear infections that were never treated and may have lasted some time. Because of the scarring and his so-called inattentiveness in school, I think a hearing test might be in order."

It turned out that Barry had suffered a minor hearing loss and that this was the cause of his poor school performance. When his teacher was made aware of his hearing problem and moved his desk to the front of the room, Barry's grades showed a substantial improvement.

Otitis media, or middle-ear infection (*oto* means "ear," *itis* means "inflamed," and *media* means "middle"), is a problem experienced by the vast majority of infants and children at one time or another, with many of them suffering repeated episodes. One physician who has done research on this disease estimates that the odds are three to one in favor of a child's having at least one episode by his second birthday. He further concludes that nearly one third of today's infants will have "three or more separate episodes of *Otitis media* by the age of 2 years."[1]

The seriousness of middle-ear infections may be underrated simply because of their frequency, but they should not be ignored. The reason for their frequency, as well as the need for appropriate medical treatment, can best be understood if we take a brief look at the anatomy of the middle ear and surrounding structures.

Functions of the ear

The ear can be divided into three parts: outer, middle, and inner. The outer ear consists not only of the external structure (which is what we are normally referring to when we speak of a person's ear) but also the tunnellike ear canal. The middle ear can best be described as an air-filled box containing three bones that are frequently referred to as the anvil, the hammer, and the stirrup. The intervibration of these three bones permits the transmission of sound from the outer to the inner ear. The inner ear, a more complex structure, changes sound waves into a type of transmission

that can be received by the brain. It also helps us keep our balance.[2,3]

When a physician examines a person's ear, he uses a flashlightlike device known as an otoscope to see into the ear canal. At the end of the ear canal he is able to see a thin piece of membrane, known as the eardrum, that separates the external and middle ear. Although it is not possible to see directly into the middle ear, the color and general appearance of the drum can make him aware of any problems in the middle ear.[4,5]

The eardrum (also called the tympanic membrane) should be shiny and gray in appearance. A healthy eardrum should also vibrate or move slightly in reaction to sound or air currents. This vibration helps in the transmission of sound. A physician can observe the drum's ability to move by blowing air into the ear with a device that can be attached to his otoscope.[6]

If the eardrum has a dull gray, red, or bulging appearance, this is probably indicative of an infection that may involve a buildup of fluid in the middle ear. This fluid can cause a sensation of pain, temporary deafness, or popping sounds. If the infection is untreated, it may either clear up on its own or linger on, perhaps causing the eardrum actually to break. When this happens, a discharge of fluid from the ear may be observed. The eardrum can heal on its own, but it will then have scar tissue that will interfere somewhat with the drum's ability to vibrate freely (and will thus diminish its ability to transmit sound). This scar tissue can be observed by a physician and will alert him to the possibility of previous untreated infections and the possible need for a hearing test (as in Barry's case).[7,8]

With an eardrum providing an airtight barrier between the external and middle ear, one might think that the middle ear would be quite safe from infection. Remember, however, that it is an air-filled structure, which means that there has to be some way for air to get into and out of it. We live in a world of constantly changing air pressure, and we would be most uncomfortable if the pressure in our middle ear were much different from the pressure in our outer ear. Air, and sometimes germs, can get into the middle ear through a passageway (known as the Eustachian tube) connecting it with the throat.[9,10] The throat, being both moist and warm, is an excellent breeding ground for bacteria. Because of their smaller size, infants and children have shorter and more horizontal Eustachian tubes, which means that bacteria can reach their middle ears more easily.[11]

Some children more vulnerable

For a variety of reasons some infants and children are much more subject to middle-ear infections than are others. Eskimos and American Indians are particularly vulnerable, as are children with cleft palate, even after the palate has been repaired. Some physicians feel that the adenoids, which are located near the Eustachian tubes and can themselves become infected, are sometimes responsible, and advocate their removal in selected cases.[12,13,14]

Infants are more subject to middle-ear infections than are older children. When an infant or child does develop a middle-ear infection, it is usually associated with an upper-respiratory-tract infection such as a cold or sore throat. It often occurs following measles or scarlet fever.[15]

Mastoiditis, an infection of the bone behind the ear (which may require surgery), is a theoretically possible consequence of *Otitis media*. Fortunately, with modern medical care, this condition is seen rarely now. The possibility of hearing loss from untreated middle-ear infections is far more than theoretical, however, and provides ample reason for parents to be aware of the symptoms of this disease.[16]

An infant with *Otitis media* may appear quite ill with problems unrelated to his ear. He may be feverish and refuse to eat. Often he will have vomiting and diarrhea. He may shriek from pain or pull on his earlobe. Since an infant's ear infection may not be apparent from the outward signs, a physician generally will check the ears routinely.[17]

A child with a middle-ear infection may complain of deafness and popping noises in one or both ears. Ear pain may or may not be present. Some very young children who do have ear pain may not be able to describe accurately their symptoms and may simply say they have a stomachache. A child who has had a serious bout with this disease should have a hearing test so that an unrecognized hearing loss will not result in his inadvertently being labeled a poor or disruptive student.[18]

All parents should be alert to the symptoms of *Otitis media*, because its very frequency makes their children likely candidates for the disease. Medical diagnosis is essential, because only a qualified physician can diagnose and treat this condition. &

REFERENCES

[1] Phil Gunby, "The Changing Picture of *Otitis Media* in Childhood," *JAMA*, vol. 242, No. 8 (August 24/31, 1979), p. 707.

[2] W. Henry Hollinshead, Ph.D., *Textbook of Anatomy*, third edition (New York: Harper & Row, 1974), pp. 884-886.

[3] Elmer L. DeGowin, M.D., *Bedside Diagnostic Examination* (New York: Macmillan Publishing Company, Inc., 1976), pp. 178-182.

[4] DeGowin, *loc. cit.*

[5] C. Dunning, personal communication.

[6] *Ibid.*

[7] Mohesen Ziai, M.D., *Pediatrics* (Boston: Little, Brown & Company, 1969), p. 247.

[8] Waldo E. Nelson, M.D., *Textbook of Pediatrics* (Philadelphia: W. B. Saunders Co., 1964), pp. 819-821.

[9] Hugo Jolly, M.D., *Diseases of Children* (Oxford: Blackwell Scientific Publications, 1976), p. 337.

[10] C. Dunning, personal communication.

[11] Jolly, *loc. cit.*

[12] Charles D. Bluestone, M.D., "Middle Ear Disease in Children," *Pediatric Clinics of North America*, vol. 21, No. 2 (May 1974), p. 379.

[13] *Ibid.*, p. 395.

[14] Jolly, *op. cit.*, p. 339.

[15] Nelson, *op. cit.*, p. 819.

[16] *Ibid.*, pp. 819-821.

[17] Jolly, *op. cit.*, p. 337.

[18] Ziai, *loc. cit.*

PREDATORS OF THE BIRD WORLD

by D. A. Delafield

Predators exist in the bird world just as they do among four-legged animals. Hawks, eagles, and vultures prey upon smaller animals just as lions and polar bears and killer whales do.

But predators are not villains. Hawks, eagles, and vultures are not the criminals of the bird world—the feathered mafia. Instead, these birds, called *Falconiformes*, fit into the scheme of nature and survival. They should not be persecuted, because they do a lot of good.

Let's take a look at these remarkable birds. The vultures—the turkey and the black—are common in the United States. These creatures are scavengers and do not have the powerful talons of the typical hawk and eagle. They do, however, have the same heavy, sharp bill. Vultures will eat anything—from termites to dead whales. The Egyptian vulture likes ostrich eggs and hurls stones on them to break them. Still another kind of vulture drops bones or rocks on eggs to split them open.

Most bird watchers aren't very interested in vultures, but you should be able to identify them. The black vulture with white tips on his underwings has about a fifty-four-inch wingspread, compared with the seventy-two-inch wings of the turkey vulture. The turkey vulture's underwings boast black-and-white parallel stripes instead of white wing tips.

All bird watchers hope to spot a California condor. The birds are rare and nearly extinct, with only a few left in the mountains of southern California. These huge creatures are marked much like turkey vultures beneath their wings. Their wingspread is about ten or eleven feet, and they are nearly four feet long from the beak to the end of the tail. In the tar pits of Rancho La Brea in California, fossil remains of condorlike birds have been found with wingspreads of more than sixteen feet. In headlong flight condors look like small man-made gliders with wing tips curved upward in a gentle fashion.

The soaring, diving hawks

Hawks are beautiful birds to watch in flight. Many bird watchers have seen hawks gliding on motionless, outstretched wings, or beating the air in graceful flight. At Hawk Mountain, Pennsylvania, these magnificent birds fly and soar above a great pass, drifting through the blue sky, supported by the unseen currents of air. Bird lovers from all over go there to observe this memorable sight.

Many artists find hawks to be fascinating subjects to capture on canvas. One of their favorites is the peregrine falcon, which is considered by many to be the world's most beautiful bird of prey. These "streamlined hawks"—as *Birds of North America** describes them—can fly 200 miles an hour in a steep dive upon their prey. Only the prairie falcon is faster. The ability of the peregrine to spot its prey at a great distance, then to dive upon its victim with great speed, is well known. It, like other hawks, has long, curved talons that enable it to prey upon small animals; it survives by the strength of these weapons.

The peregrine was almost obliterated by hawk haters, but now it is making a comeback and "seems to be on the brink of recovery," reported *Audubon Magazine* in July, 1979. If you plan to go looking for a peregrine you should first look at a good picture of it and read a description of this hawk. Then memorize the facts about its facial pattern, its dark cap, and large size. Someday you may spot one of these superbirds flying in the sky. You might even see the peregrine in flight passing food to its mate, who flies upside down to receive its meal.

One of my favorite hawks is the marsh hawk, which can be found coast to coast in North America. He's a common sight over grasslands and marshes, a great rat killer, and an enemy of mice and rodents in general. He is easy to identify because of his white rump and his habit of flying just a few feet over the ground and tilting from side to side. Look for the gray and brown colors, and the bands on his tail. He is not a small bird, for he grows to approximately 16½ inches in length and has a wingspread of approximately 42 inches.

A golden bird

The golden eagle is not as easy to spot as the marsh hawk. Everybody is familiar with the bald eagle—the national bird of the United States of America—and so the golden usually takes second place. The two birds are approximately the same size, but the golden is covered with a rich brown plumage, and its wings are rounded. This huge bird can be found almost anywhere in the Western United States, at almost any time of the year—if you are fortunate.

Not long ago I encountered a full-grown golden eagle on the main highway just a mile from the heart of Loma Linda, California. He took off on his six-foot wings as my car approached. I have also seen a golden eagle on parched and semiarid desert in the heart of the Midwest. Driving along one bright morning, I noticed one come in for a perfect landing on a huge rock surrounded by sagebrush. He was out rabbit hunting. I got out of my car and slowly approached him from behind the cover of sagebrush, but he spotted me and took flight.

Now let's take a look at the kite—not the kind that

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boys and girls fly in the sky on beautiful spring days, but the everglade kite, a South American bird. The kite survives in North America but is very rare here. Its flight is not kitelike at all, but floppy. One unique thing about the everglade kite is the fact that it feeds entirely on a freshwater snail called *Pomus depressus*, and is equipped with a long hooked bill to remove the meat from the shell.

I once spent half a day driving into the remote area of Lake Okeechobee and Loxahatchee Refuge in Florida, searching for the everglade kite. I looked for its broad wings and dark body with white on the tail. But although I looked until the sun disappeared behind the horizon, I never found an everglade kite. It's worth it, though, to go out to try to find a rare bird once in a while, even if you're not always successful. You're sure to find *something* interesting—on this trip, a wildcat crossed the road in front of me.

Another hard-to-find bird is the caracara. It is a tropical American bird with only one species ranging into the United States, where it may be found in lower California, southern Texas, and central Florida. These creatures have a wingspread of about four feet. If you looked up at one as it flew over, you would be able to see underwings colored much like the black vulture's. You might also see this long-legged bird on the ground as it scavenges for food.

Yes, there are predators in the bird world, as well as in the kingdom of four-footed beasts. But these predators are generally beneficial to man, rather than harmful. They help to balance the population of mice and rats, and to clean up the remains of dead animals. And they are certainly interesting to watch!

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*Chandler S. Robbins, Bertel Bruun, and Herbert S. Zim, *Birds of North America* (New York: Western Publishing Company, Inc., 1966), p. 78.

GAZETTE

Health pamphlets available

The LIFE & HEALTH office frequently receives announcements of health-educational materials that are available to the public. We feel the following publications may be of benefit to some of our readers:

How to Keep Your Jogging Feet in Sportshape Condition, a 16-page booklet. Burlington Socks, Dept. J, 1345 Avenue of the Americas, New York, New York 10019, 50 cents.

Sneezing, Wheezing and Scratching, Doris Rapp, M.D. For individuals with allergy-related respiratory and skin-care problems. The ECR Collection, P.O. Box 615, Los Altos, California 94022. Available in Spanish or English for $1.50.

Cardiac Alert, Health Communications, Inc., Waban, Massachusetts. A periodical for the lay person, devoted to education about and prevention of heart disease, written by heart specialists from well-known universities and medical centers. Subscriptions are $24 per year (twelve issues). Complimentary copies will be sent upon request. Requests and inquiries should be sent to: Subscription Service Department, 8 Bluestone Terrace, Morristown, New Jersey 07960.

The following booklets are available from the Public Affairs Committee, Inc., 381 Park Avenue South, New York, New York 10016, for 50 cents each:

Know Your Medication—How to Use Over-the-counter and Prescription Drugs, Publication #570

Recreation for Disabled Persons, Publication #571

The Continuing Campaign for Cleaner Air, Publication #572

Smoking—A Habit That Should Be Broken, Publication #573

Ageism—Discrimination Against Older People, Publication #575

Stroke: New Approaches to Prevention and Treatment, Publication #576

Mental Retardation—A Changing World, Publication #577

Learning Disabilities: Problems and Progress, Publication #578

The following health-related booklets and pamphlets are free of charge:

1979-80 International Directory of Access Guides, An Aid for Disabled and Elderly Travelers. Write: Access Guide Directory, Rehabilitation International U.S.A., 20 West 40th Street, New York, New York 10018.

If You've Thought About Breast Cancer, Office of Cancer Communications, National Cancer Institute, Bethesda, Maryland 20205.

Fly-Rights, A Guide to Air Travel in the United States, Civil Aeronautics Board, Washington, D.C. 20428.

Cookbooks for Diabetics Selected Annotations, a bibliography prepared for health-care providers, health educators, and others involved in preparing meals for persons with diabetes. National Diabetes Information Clearinghouse, 805 15th Street NW., Suite 500, Washington, D.C. 20005.

Self-examination After Breast Cancer Surgery, Ephraim McDowell Community Cancer Network, 915 South Limestone, Lexington, Kentucky 40536.

National Easter Seal Society Publications Catalog, a bibliography of materials available on physical disabilities. The National Easter Seal Society, 2023 West Ogden Avenue, Chicago, Illinois 60612.

Relief for nocturnal leg cramps

If you frequently wake up at night with painful leg cramps, you may have tried many suggested remedies—probably with little success. Here is some good news. You may be able to get permanent relief through a simple exercise.

Here is what Dr. Harry W. Daniell, of Redding, California, suggests: stand with shoes off, facing a wall two to three feet away and then lean forward, using hands and arms to regulate forward tilt and keep the heels in contact with the floor, until a moderately intense but not painful pulling sensation develops in the calf muscles. Hold the stretching position for ten seconds, then repeat after a five-second period of relaxation.

Dr. Daniell advises performing this exercise three times daily until leg cramps disappear, then repeating it as necessary to keep legs cramp-free. Dr. Daniell claims most of his patients were cured within a week, and half of them after only two or three nights.

—*Health Insurance News*, 1850 K Street, NW., Washington, D.C., February, 1980.

Pills must not displace food

Along with the bottle of multivitamin pills for daily use should go a statement such as "No drug preparation can take the place of regular consumption of a good diet."

For most individuals, no injury results from taking a daily pill of supplementary nutrients, but pill takers may attain a false sense of security about their nutritional status. The idea that a pharmaceutical preparation can take the place of a balanced diet is erroneous, says Donald B. McCormick, professor of nutritional biochemistry of Cornell University, in *Nutrition & the M.D.* of October, 1979.

Dr. McCormick also discusses the megadoses of vitamins and warns of their possible dangers.

—*Nutrition Notes*, 81, Winter, 1980, United Fresh Fruit and Vegetable Association, Alexandria, Virginia.

Thinking about surgery? Think about getting a second opinion

The U.S. Department of Health, Education, and Welfare initiated a program in 1978 to encourage citizens to seek second opinions before undergoing nonemergency surgery. It is part of an effort to expand patient knowledge about surgery and to help contain rising health-care costs. Patients who want second opinions can ask their doctors for the name of another physician, can select another doctor of their own, or can obtain the name of one from county medical societies. They may call a toll-free number (800 638-6833) to find referral doctors and to learn which physicians accept Medicare and Medicaid payment for their consulting services.

The fact sheet on the Second Opinion Program and the brochure telling how to get a second opinion can be obtained by writing Surgery, Department of Health, Education, and Welfare (HCFA), Washington, D.C. 20201.

Psychiatric-illness symptoms found similar to thyroid disease

Some persons exhibiting the abnormal signs and symptoms of psychiatric illness may be misdiagnosed. Thyroid-function tests were routinely performed on 480 patients admitted to the psychiatric-evaluation unit of the Yale-New Haven Hospital over a two-year span. Test results for thyroid disease were higher than those found in a general hospital setting and much higher than that reported for incidence in the general population.

The thyroid-function test is important in examining such patients, because the symptoms of thyroid disease are often dismissed as manifestations of a psychiatric illness. Patients with known thyroid disease may be receiving inadequate or excessive replacement therapy. Also, drugs given for treatment for mental states, particularly lithium and phenytoin, may induce alterations in thyroid function.

—News release, U.S. Department of Health and Human Services, National Institutes of Health, Bethesda, Maryland, 1979.

New technique lets patients swallow meals through their veins

It is well known that adequate nutrition is necessary to maintain health. Hospital patients who are debilitated from surgical complications, disease, or increased metabolic demands often have greater nutritional requirements than can be provided orally. It is estimated that 10 to 30 percent of deaths in hospitals are either directly or partially caused by malnutrition.

Total parenteral nutrition—also called intravenous hyperalimentation—is a new technique designed to give patients *all* required nutrients by vein.

The traditional intravenous feeding of dextrose (sugar water), providing only 500 to 600 calories, is not sufficient for more than a few days. Even when fortified by vitamins and minerals, and altered with a solution of predigested proteins, it cannot sustain body weight.

Total parenteral nutrition utilizes a large vein—the superior vena cava—that is able to withstand a concentrated nutrient solution providing the patient with all of his nutritional needs.

—News release, District of Columbia Dietetic Association, Spring, 1980.

NATIONAL CANCER INSTITUTE BEGINS LAETRILE TESTS WITH PATIENTS

The first clinical trial of the possible effectiveness of Laetrile (amygdalin) in the treatment of cancer began July 1, says the U.S. Department of Health and Human Services' National Cancer Institute.

The NCI clinical trial is being carried out simultaneously at four cancer research centers, under the direction of the NCI Investigational Drug Branch of the Cancer Therapy Evaluation Program.

In the course of the study, approximately 200 cancer patients for whom no other treatment has been effective will be given Laetrile together with a special diet and supplemental vitamins. The study could take up to two years to complete.

Laetrile, as the chemical amygdalin has come to be known, is a naturally occurring plant product containing glucose, a common sugar. The amygdalin molecule can release hydrogen cyanide, a common poison, when the molecule breaks down in the body. Laetrile is found in the kernels of bitter almonds, apricots, peaches, and plums.

The clinical trial with Laetrile will follow the same testing approach used with other compounds being tested by NCI for effectiveness in treating cancer. Criteria for selecting patients for the Laetrile study are similar to the criteria used for all initial studies of effectiveness of other compounds in the treatment of cancer.

The clinical trial will include patients for whom no established treatment has been demonstrated to be effective. This includes patients who no longer respond to effective drugs, as well as patients for whom no proven treatment exists. All patients must have a measurable cancer—a tumor mass that can be followed through X-ray or other examination for growth or shrinkage.

Before permitting the efficacy testing of the drug, the U.S. Food and Drug Administration last spring required a test of Laetrile for possible toxic effects in a small number of cancer patients. This test was conducted with six patients at the Mayo Clinic to determine whether administration of the drug together with a special diet and supplemental vitamins might be associated with adverse effects. Special care was taken to monitor the patients, particularly with regard to cyanide toxicity.

Five of the six patients experienced no toxic effects that could be directly or indirectly ascribed to Laetrile therapy. The sixth patient showed clinical evidence of toxicity only after eating large quantities of raw almonds, part of the special diet. Raw almonds appear to stimulate the amount and rate of cyanide released if eaten during Laetrile treatment.

The trial is being conducted at the Mayo Clinic in Rochester, Minnesota, by Dr. Charles Moertel; at Memorial Sloan-Kettering Cancer Center in New York City by Dr. Charles Young; at the University of California at Los Angeles Jonsson Cancer Center by Dr. Gregory Sarna; and at the University of Arizona Health Sciences Center in Tucson by Dr. Stephen Jones. The Mayo Clinic will coordinate the data from all four institutions.

A third clinical study to assess Laetrile's ability to provide relief of symptoms will begin in the near future. This study will measure such clinical effects as pain relief and an increase in the patients' capability to carry out normal daily living functions.

Cancer patients who are interested in taking part in the treatment effectiveness studies should call the National Cancer Information Service toll-free number 800-638-6694 (in Maryland, 800-492-6600; in Alaska and Hawaii, 800-638-6070). Patients who may be eligible will be referred to one of the participating institutions.

HOW TO GET YOUR WORK DONE-EVEN WITH A NEW BABY

by Audrey Carli

When I was getting ready to leave the hospital with my first baby, my roommate smiled and wished me the best. "I suppose your sister will have a warm dinner awaiting you so you can rest."

I smiled, hugged my baby, and anticipated the tasty meal. Only I didn't know then that my sister's car had broken down and she wouldn't arrive until the next day.

Dust rolls and empty plates welcomed me home. My student-husband had been too busy with college tests and his full-time second-shift job to keep up on all the household chores. (Men often don't see the dust rolls that many women see!)

All went well when my sister was there, but after she left, it seemed that the ironing basket quickly overflowed, dirty dishes piled up faster than usual, and the baby's stack of clean diapers rapidly disappeared.

I sagged with weariness, until finally I sat down, wrote out a list, and got organized! My neighbor, who had three toddlers and also helped her husband with his business' accounting, gave me some valuable tips.

First, I made a list of the most urgent tasks, then enjoyed crossing off each job after it was finished. If I got only half the tasks done on the day they were attempted, I put them on the next day's list. When I didn't get to the bottom of the list by day three or four, I took another look. I then tried to combine tasks or eliminate them if they were not urgent. For example, one item was to shop for my brother's birthday gift. I could not get to the shopping center, so I ordered him a subscription to his favorite magazine and did that right from home, by mail. I learned that many tasks could be done by mail or telephone.

Instead of driving from store to store to hunt for an item, I would telephone several places to find out which business had the item, how much it cost, then compare costs, and drive to one place instead of from place to place. I saved gasoline, as well as time.

Second, I squeezed in time between tasks to enjoy a break. After vacuuming, for instance, I would check on the baby to be sure that she was all right, then sit down and read one book chapter. Or I would write to Mom or do some other enjoyable thing.

If the baby was awake I would take her for a carriage outing. I'd get a walk, fresh air, and a break, too. Then when time was up I would put the baby down for her nap or into the playpen for her fun time and resume my work.

Third, I took advantage of work savers: paper plates, wash-and-wear clothing, and disposable diapers, even when it was difficult to squeeze them into our college-student-family budget. We discovered a small restaurant nearby that served a weekend special that cost so little it wasn't worth cooking at home, then using hot water, detergent, and time to wash the dishes. So we all relaxed and were refreshed for the next busy hours.

Fourth, I knew that if I had more children I'd use my neighbor's method and let other family members help with some of the household chores. My friend, Ann, had toy-pick-up time for her toddlers, and they liked to help Mommy. She also had wet-towel- and washcloth-pick-up time. The bathroom was tidied, and the toddlers felt glad to be helpers.

Fifth, I had times when I was just too tired to wash the clothes at 8:00 A.M. Friday. So I did another important task instead. Then, later, I would do the laundry and know I didn't have to do the other task, too. Changing work patterns helped as I found I was more in the mood for vacuuming when I should have been doing laundry, or vice-versa. The main point is: the work got done with substitutions.

Sixth, I had to stop working a few times before my list was finished because I felt weak. As a result of undone chores, tension mounted. The few times I insisted on finishing the job no matter what, I found myself that night wide awake with insomnia. So I knew it was well worth having a schedule, but I also learned there were times when a mother has to be flexible as long as the children and husband do not suffer.

And I did find out that the next day found me fresher and faster with my housework when I paid attention to weariness and eased up when my fatigued body told me to.

With a new baby, scheduled days—with a bit of flexibility when pressures hit—can make motherhood more joyful, and help make a more tranquil home for all. &

Audrey Carli is a homemaker and free-lance writer who lives in Stambaugh, Michigan. She is a frequent contributor to LIFE & HEALTH, and has sold articles to numerous other magazines.

BOOKSHELF

Reviewing or listing of books does not constitute endorsement.

Heating With Wood, by the editors of *The Family Handyman* magazine. Butterick Publishing Company, 708 Third Avenue, New York, New York 10017, 1978, 192 pages, $6.95 paperback.

In order to combat the rising cost of oil, gas, and electric heat and to conserve energy, the editors of *The Family Handyman* have put together a volume of information to help you use wood fuel safely. It includes facts about firewood, selecting and installing woodburning units and chimneys, and using and buying saws and axes. This book can be your answer for more inexpensive energy. EMR

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The No-Nonsense Guide to Food and Nutrition, Marion McGill, M.S., and Orrea Pye, Ph.D. Butterick Publishing, 708 Third Avenue, New York, New York 10017, 1978, 224 pages, $5.95 paperback.

This comprehensive, easy-to-understand text takes the mystery out of nutrition, showing how to plan meals that are both delicious and nutritious.

Clearly written in everyday language, the book explains what nutrients are, where they come from, and why we need them. Separate chapters describe carbohydrates, fats, proteins, minerals, and vitamins—what they do in our bodies, and how much of them we need. Information on foods in the four basic groups—milk, protein, grains, fruits and vegetables—is organized to cover nutritional values and usage tips for various foods.

Discussion on nutritional labeling, regulatory standards, and convenience foods educates the consumer to choose foods for well-balanced meals. Nutritional charts and food ideas to meet the needs of people of all ages are also included. DGN

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A Word or Two Before You Go, Broughton Waddy, M.D., and Ralph Townley. W. W. Norton & Company, Inc., 500 Fifth Avenue, New York, New York 10036, 1980, 189 pages, $11.95 hardback, $3.95 paperback.

Two world travelers have collaborated on this book to prepare the modern traveler for journeys to foreign lands, from Australia to Zambia. Waddy is a London medical doctor specializing in tropical diseases; Townley is a British director in the United Nations Secretariat. Between them, with the exception of some Socialist and Far Eastern countries, they have been everywhere in the world.

This is not a mere scientific treatise that lists the symptoms of horrifying tropical diseases and the dangers of exotic wild animals, although these important facts are included. More delightfully, it is a book through which lilts an undercurrent of English humor, with frequent anecdotes from the experiences of world travelers dotting its pages.

Waddy's and Townley's suggestions can keep you healthy amid the jeopardies of foreign travel. They tell you how to prepare for your journey, from getting the necessary vaccinations to packing your suitcase and medicine kit. They also give advice for the time when you get to your destination, telling how to avoid such perils as insect pests, hippopotamuses, malaria, tapanuli fever, and contaminated food. They add suggestions on how to avoid boredom and how to keep physically fit when you're away from your usual diet and exercise routine. DGN

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The Patchwork Quilt Design and Coloring Book, Judith LaBelle Larsen and Carol Waugh Gull. Butterick Publishing, 708 Third Avenue, New York, New York 10017, 1977, 224 pages, $8.95 paperback.

Here it is—a coloring book for grown-ups! *Patchwork Quilt* tells you everything you need to know about making your own patchwork quilt, from coloring to sewing.

It introduces you to the basics of color and design, and shows you how to calculate the amount of fabric you'll need; the number, size, and shape of the pieces in the quilt; and even how long it will take you to complete it. More than 175 color illustrations and 75 fill-in color grids allow you to work out your own color scheme, and easy-to-read yardage charts and worksheets make this a workbook as well as a guide.

Fifty traditional patchwork designs—from Prairie Queen to Yankee's Puzzle—are shown with complete instructions for making them in any one of four bedspread sizes. One hundred design variations spark the imagination, and step-by-step construction techniques make the image real. DGN

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Coronary! Prediction and Prevention, David T. Nash, M.D. Signet Books, The New American Library, Inc., P.O. Box 999, Bergenfield, New Jersey 07621, 1978, 260 pages, $2.50 paperback.

This book brings you up-to-date on what experts now know about heart attacks and their causes, warning signs, effects, and treatment.

Dr. Nash, a fellow of the American College of Cardiologists, explains the risk factors in cardiac disease, gives you a formula for calculating your own heart-attack dangers, then shows you how to minimize those risks. His prevention-oriented guidebook gives you an effective diet-and-exercise plan, as well as a proven way to stop smoking.

Coronary! describes what a heart attack is really like, explains its complications, and recommends a safe post-heart-attack life style. It also discusses the medical aspects of heart disease, including open-heart surgery, new drugs, treatments, and diagnostic techniques. DGN

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The Flight of the Stork, Anne Bernstein, Ph.D. Dell Publishing Co., Inc., 1 Dag Hammarskjold Plaza, New York, New York 10017, 1978, 220 pages, $2.50 paperback.

This straightforward book for parents explains what, when, and how to tell children about sex. DGN

BASIC FOOD GROUPS

DAILY PORTIONS

Vegetable-fruit group
four or more servings

Citrus fruits, tomatoes, cabbage, peppers, melons, berries, dark-green or deep-yellow vegetables, potatoes, and others

Bread-cereal group
four or more servings

Breads, cereals, and other grain products made from whole (preferred), enriched, or restored grains

Protein group
two or more servings

Dry beans, dry peas, lentils, garbanzos, nuts, peanuts, peanut butter, eggs, cottage cheese, soy cheese, vegetable proteins

Milk group
children--3 to 4 cups
adults--2 or more cups

Whole, evaporated, or skim milk, reconstituted dry milk, buttermilk, or soybean milk

Eat additional food as needed for more calories

Is your kitchen suffering from the decorative "ho-hums"? Do you want to brighten things up and at the same time have a daily reminder of your nutritional needs? *Life & Health* is making available to you this beautiful full-color poster on the basic food groups for only $1.00. Order your 21" x 28" poster today!

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Loma Linda Sizzle Burgers capture the wonderful flavor and texture of meat hamburgers, and there's no cholesterol. They're made from Loma Linda's special ingredient, combining two nutritious vegetable proteins. Thanks to our continuing food and flavor advancements, you get terrific taste without preservatives or added MSG. No animal fat or cholesterol, either!

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