The Newsletter of
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This first issue of 1989 summarizes and expands on papers delivered at The First International Montreux Congress on Stress held in Montreux, Switzerland, November 30 through December 2, 1988. Dr. Stewart Wolf received the Hans Selye Award of The American Institute of Stress at a gala opening dinner ceremony. His presentation, entitled "The Scales of Libra,' ' provided a compelling portrayal of the relationship between social support and stability and cardiovascular disease. His observations were corroborated by subsequent speakers who examined this issue from other vantage points. Further reinforcement comes from other research reports also abstracted in this issue, demonstrating the adverse health effects of social isolation and lack of time to adapt to lifestyle changes that cause psychosocial stress.

Cardiovascular Disease, Cancer and Other "Diseases of Civilization":

Are Stress, Lack of Social Stability and Support the Real Causes?

It has long been observed that socially isolated, lonely individuals tend to die earlier, or suffer more from emotional and physical health problems. Those who are single, widowed or divorced have higher rates of tuberculosis, accidents, cancer, cardiovascular disease and psychiatric disorders such as schizophrenia. Indeed, age-adjusted mortality rates reveal that deaths from all causes are consistently higher among the unmarried than married controls. Prospective studies in Sweden, Finland, California, Michigan and in blacks and whites in the same Georgia county all confirm that the lowest levels of social integration are associated with the highest mortality rates. How can such findings be explained? What is the cause-effect relationship? Is it lack of social support that causes us to be ill, or is it that unhealthy people are less likely to develop and retain strong personal relationships? Which comes first, the chicken or the egg? Or is it possible that some underlying behavioral disorder contributes to both inferior health as well as poor social ties?

ALSO INCLUDED IN THIS ISSUE

Dr. Paul J. Rosch, President of The American Institute of Stress, and Dr. Steward Wolf, honoree.

For further information on the original source of abstracts and other reprints available on similar subjects, please send a self-addressed stamped envelope to: Reprint Division, American Institute of Stress, 124 Park Avenue, Yonkers, NY 10703.

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Paul J. Rosch, M.D., F.A.C.P.
Editor-in-Chief

Dr. Stewart Wolf and the Saga of Roseto

Some insight and possibly answers to these intriguing questions were provided at the recent First International Montreux Congress on Stress, co-sponsored by the American Institute of Stress and Biotonus Clinic. Dr. Stewart Wolf, the recipient of the Hans Selye award of The American Institute of Stress, reported for the first time the results of his 25-year follow-up of the residents of Roseto. Thirty years ago, this small town in Pennsylvania had one of the lowest cardiovascular death rates in the nation, despite any advantage of decreased risk as a consequence of cholesterol and blood pressure levels, or smoking, dietary and exercise habits. What was unique, Wolf noted, was that the community was almost entirely inhabited by descendants of Italians who had immigrated there 100 years previously from a small village in Italy. The site had been carefully chosen because of its similarity to their birthplace, and not only was its name, Roseto, retained, but also the traditional ingrained values, customs and traditions of their forebears. The elderly were respected and cherished. They felt needed—because they were. Most families had three generations or more living under the same roof. Although the oldest nursing home in the country was nearby, it rarely housed anyone from Roseto. There was a strict taboo against ostentation and pomposity, such that there were no external trappings in terms of better homes, cars, clothing, etc. that would signal or reflect more wealth, power or higher station. Any display of superiority was carefully avoided since this would bring the curse of the "evil eye." There were few marriages outside the faith, and the first-born child was routinely named after a grandparent. Rosetans were warm, generous and friendly, eager to celebrate a first communion, graduation, birthday, anniversary or any other excuse for a family event that would actively involve those of all ages.

Wolf's Prediction

In 1963, Wolf made the rather bold prediction that should the Rosetans abandon their traditional values and customs, they would also lose their favorable protection from heart attacks. By 1970 it was clear that many of these century-old taboos and traditions had indeed begun to crumble. Cadillacs and expensive foreign luxury cars became increasingly common as did lavish ranch type suburban homes with swimming pools and other enhancements. Mixed ethnic marriages soared from 18 to 79 per cent. The first two baby boys were no longer uniformly named after their grandparents, but rather for the father, godfather, or nobody in particular. Names like Lisa, Kelly, and Allison began to appear. Local shops and restaurants disappeared as Rosetans joined country clubs and drove to supermarkets and fancy restaurants. Attendance at Men's Club functions and the local church steadily declined. It had also become increasingly apparent that aging parents had lost their prime position as elder statesmen whose advice was sought and respected.

The prediction proved to be quite accurate. Deaths from heart attacks increased in the face of a general decline throughout the nation and a local decrease in fat consumption and smoking. Coronary heart disease more than doubled, hypertension tripled, and there was a substantial increase in cerebrovascular accidents despite the concomitant reduction in standard risk factors. As Wolf commented, these findings should not be surprising. Fifty years ago, C.P. Donossan, a physician with extensive experience in black Africa, had noted in his book *Civilization and Disease*, a complete absence of hypertension, diabetes and peptic ulcer in remote areas of the continent where the social structure remained relatively stable. However, these and other of Selye's stress-related "Diseases of Adaptation" rapidly emerged when the intrusion of civilization caused a severe perturbation of social order and balance. Similarly, the medical missionary, Albert Schweizer, found no cancer or heart disease when he first visited the Congo, nor did the Arctic explorer Vilhjalmur Stefansson, encounter such problems in remote Eskimo settlements. However, both subsequently reported the gradual and increasing emergence of both disorders "when the white man came," and change in diet did not seem to be a factor. As Alvinn Toffler noted in *Future Shock*, "By subjecting individuals to too much change in

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Wolf's Prediction

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too short a time, we induce disorientation and shattering stress." Hippocrates wrote over two thousand years ago, "Those things which one has been accustomed to for a long time, although worse than things one has not been accustomed to, usually give less disturbance." Wolf's careful study of the Roseto experience appears to confirm this, as well as the salubrious benefits of an environment that fosters close family and community relationships and its accompanying sense of continuity and belonging.

"The thing that hath been, it is that which shall be; and that which is done is that which shall be done: and there is no new thing under the sun."

— Ecclesiastes

Social Support, Biopsychosocial Stress and Health

The First International Montreux Congress on Stress was designed by our Institute to illustrate the need for an interdisciplinary approach to the study of stress. This was demonstrated by the unusual relevance and interrelationships between presentations by clinicians and researchers working in seemingly unrelated areas. Dr. Stewart Wolf's study of Roseto revealed the powerful cardioprotective effects of strong social support and stability. This was confirmed by the presentation of Dr. Nico T. Malan, of The Potchefstroom University for Christian Higher Eucation, South Africa. His group provides missionary and health services to remotely isolated villages. He reported that in one such location, with essentially no contact with the outside world, there was almost a complete absence of coronary heart disease, hypertension and common malignancies. This protection appeared to be related to close family relationships and the strong social stability provided by traditional taboos, customs and rituals rather than diet, activity patterns, etc.

More on Heart Attacks, Urbanization and Job Stress

Dr. Ray Rosenman, one of the co-founders of the Type A hypothesis, showed a series of slides depicting geographical shifts in population densities at five and ten year intervals across the United States since 1950. This was followed by another series of slides showing changes in the rate and distribution of deaths due to heart attack throughout the country over the same time periods. The similarity, if not congruence, between these two sets of slides was quite obvious and again supported the contention that coronary heart disease was strongly associated with urbanization. Similarly, the marked increase in cardiovascular death rates in Las Vegas, when compared to Salt Lake City, appears best explained by the contrasting differences in social support and stability in those two cities. With respect to the influence of standard risk factors, it was noted that despite equal levels of cholesterol, hypertension and smoking, deaths due to heart attack are much higher in Framingham, Massachusetts than Honolulu, or other vacation sites.

Dr. Tores Theorell of the Karolinska Institute in Stockholm provided additional insight into the relationship between urban stress and heart attacks. His research studies, both in Sweden and the United States, revealed that stress in the workplace is closely correlated with heart attacks, regardless of smoking, hypertension, cholesterol or exercise patterns. Jobs which are simultaneously low in authority and social support and high in responsibility carry the greatest risks.

Predicting and Preventing Deaths Due to Cardiovascular Disease And Cancer

Dr. Hans Eysenck, Emeritus Professor at the University of London, and one of the world's most quoted psychologists provided further insight into the health effects of personal relationships and psychosocial stress. This was based on the results of collaborative efforts with Ronald Grossarth-Maticek, a Yugoslav psychologist, who separated individuals into four personality types and then followed them for ten or more years. Type 1 included those with a state of chronic hopelessness due to *loss of close emotional relationships* or chronic frustration because of an inability to achieve goals. Almost half of these individuals died from cancer, while fewer than one-tenth died from heart disease. Type 2 might be characterized as having a tendency to be chronically annoyed by other people. As a consequence, there is a tendency for distancing and alienation which *prevents the establishment and maintenance of strong social ties.* About one-third of Type 2 died of heart disease but only one-fifth from cancer. This group also demonstrated a high incidence of peptic ulcer. Type 3 is associated with neurotic and psychotic problems that cause them to alternate or vacillate between desires for close relationships and a conflicting detached attitude that leads to separation. Type 4 are the healthiest since they seem able to regulate their behavior by developing ties with those who are important to them and detaching themselves

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Predicting and Preventing Deaths Due to Cardiovascular Disease And Cancer

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from others who have a detrimental effect. Types 3 and 4 had relatively few deaths. These findings have been replicated in three separate studies. In one of them, Type 1 and 2 subjects were further rated in terms of suffering from severe stress, since this has also been implicated in cardiovascular disease and cancer. These results appear to confirm this since about 40 per cent more of this subgroup died of these diseases after 10 and 13 year follow-up.

Even more startling were the promising results of an intervention program, designed to teach cancer and coronary-prone patients to express their emotions more readily, cope with stress, and improve social skills to promote self reliance and diminish emotional dependencies. One hundred Type 1 cancer-prone patients were divided into two matched groups: 50 of whom received therapy and 50 who did not. After 13 years, 45 people who were treated were still alive as compared to only 19 in the no-therapy group. A similar experiment was done in the Type 2 heart disease group and after 13 years there were 37 survivors with therapy in contrast to only 17 of the controls. In another study, 24 pairs of cancer patients equal in age, sex, social background, type and extent of cancer and medical treatment were compared. One of the pair was selected at random to receive therapy and the other was used as a control. The therapy group survived an average of five years in contrast to three years for the other group. An additional study examined 100 women with terminal breast cancer, 50 of whom elected to have chemotherapy with an equal number refusing any treatment. Half of each group also received behavior therapy. Those with no therapy survived an average of 11 months, those who received only chemotherapy 14 months, behavior therapy only 15 months, but 22 months' survival was achieved in the chemotherapy-behavioral and stress-reduction therapy group. These findings have been replicated independently in the United States. In one study of breast cancer patients, those who received behavioral-stress-reduction therapy survived an average of 35 months in contrast to only 19 months for those who did not.

As Dr. Eysenck noted, 4000 years ago the Indian sage, Mahabharata, said "There are two classes of disease—bodily and mental. Each arises from the other, and neither exists without the other. Mental disorders arise from physical ones, and likewise physical disorders arise from mental ones." Just as physicists have discovered the futility of continuing to separate space and time, it is necessary for physicians to recognize the inappropriateness of thinking about mind and body as distinct entities rather than as inextricably intertwined components of a continuum.

Type A's, Social Support, and Coronary Heart Disease

Eighty-six men and twenty-seven women who were scheduled for angiography to measure their degree of coronary heart disease were evaluated for Type A behavior, as well as the amount of support they felt from peers, family, and friends. Fifty-four men and seventeen of the women were rated as Type A's and in this group comparison of the angiograms and social support characteristics confirmed that those with the closest ties tended to have less severe heart trouble. Surprisingly enough, for the Type B's, those with the most overall family support turned out to be the sickest. The reason for this is not clear although it is suggested that as Type B's become sicker, their families are more likely to rally around them, whereas, "difficult Type A's elicit less social support." The researchers concluded that Type A's may be able to lower their risk by an active effort to "avail themselves more of social support."

"Destiny is not the amount of chance; it is a matter of choice. It is not a thing to be waited for; it is a thing to be achieved."

— William Jennings Bryan

Social Support and Hypertension

Essential hypertension obviously has many causes which may account for the many different types of therapies currently being prescribed. Family history, diet, weight, alcohol consumption, physical activity, smoking, and psychosocial stress all seem to play a role. In one recent study of almost 500 men born in 1914 such health and lifestyle factors were evaluated and correlated with blood pressure levels. Social support was assessed by interview and was rated in three main classifications. (1) Social network (social anchorage, contact frequency, and social participation). (2) Social support (the individual's interaction with his or her social network). (3) Social influence (the degree to which the individual was able to control his or her environment). Average blood pressures were 153/93 and almost a quarter of the patients took medication for hypertension. Significant differences in the diastolic blood pressure were found between the three levels of social networking and social anchorage alone was found to have an independent correlation with both systolic and diastolic blood pressure. This study of elderly men supports previous reports demonstrating the important effect of social factors and interpersonal communication on blood pressure.

Social Relationships And Health

As noted elsewhere in this Newsletter, considerable evidence supports the notion that the quality of social relationships has powerful health effects. Socially isolated, lonely individuals die earlier and appear to be less healthy both psychologically and physically. Unmarried and less socially integrated individuals are more likely to commit suicide, have higher rates of tuberculosis, accidents, as well as psychiatric disorders such as schizophrenia. Age-adjusted mortality rates reveal that deaths from all causes are consistently higher among the unmarried than the married. The question is which comes first, the chicken or the egg. Is it a lack of social support that causes people to become ill or die, or is it that unhealthy people are less likely to establish and maintain strong social relationships? An alternative possibility is that some underlying personality factor predisposes to both poor health as well as inferior social support buffers. Age-adjusted mortality prospective studies in males, studies in California, Michigan, Georgia, Sweden and Finland, all confirm that the lowest levels of social integration are associated with the highest mortality rates and this was true for both blacks and whites in the same county in Georgia.

In addition to such broad based epidemiological surveys, other research reveals that affectionate petting by humans, or even their close presence, can reduce cardiovascular stress in dogs, cats, horses and rabbits and reduces the arteriosclerotic effects of a high fat diet in rabbits. Even the presence of, or physical contact with, another person can improve cardiac responses of patients in coronary care units and in other stressful situations. How such effects are mediated is not clear. It has been suggested that close, supportive personal contact may possibly activate anterior hypothalamic activities and inhibit those in the posterior hypothalamus resulting in a diminution of ACTH, cortisol, and catecholamine release, and heightened sympathetic activity. Whatever the explanation, the correlation between poor social support systems and morbidity and mortality is most impressive. It is stronger than the evidence which led to verification of the Type A behavior pattern as a risk factor for coronary heart disease and is also greater than the relative risk for all cause mortality reported for cigarette smoking. Such observations will assume increasing importance as the number of isolated elderly individuals increase and rising divorce rates cause further adverse disruptive personal relationships. In contrast with the 1950's, adults in the United States in the 1970's were less apt to be married, more likely to be living alone, less often to belong to voluntary organizations, or to visit informally with others. It seems likely that the 21st century will demonstrate a further increase in the number of older individuals who lack spouses or children — the people to whom older people most often turn for relatedness and support.

"Many people live alone and like it, but most of them live alone and look it."

— Gelette Burgess

Stress and Gastrointestinal Motility

The role of stress in certain gastrointestinal disorders remains controversial. Observations of patients with gastric fistuale confirm that emotions have a powerful effect on blood supply to the stomach, gastric secretion, and motility. Stressful emotions and specific personality characteristics have been associated with peptic ulcer, regional ileitis, ulcerative colitis, and irritable bowel syndrome, but it is often difficult to distinguish between cause and effect. One recent study suggests that psychological traits are unrelated to the development of gastrointestinal motility disorders but may influence whether or not patients consult a physician. Eighty-four percent of patients with non-specific esophageal motility disorders had psychiatric diagnoses such as depression, anxiety disorder, and phobias in contrast to only 31% of normal controls or those with specific gastrointestinal motility disorders. In healthy patients, 50-80% demonstrated altered gastrointestinal motility as a consequence of psychological stress. In men, this was predominately related to concerns about career and finances and, in women, the major stresses involved family or interpersonal relationships. Several reports note that irritable bowel syndrome appears to be associated with loss of a parent through death or divorce during childhood. Studies of clinic patients with irritable bowel syndrome and lactose intolerance revealed a mugh higher incidence of psychopathology than patients in the community with these same disorders but who did not seek medical attention. This suggests that psychopathology is not related to these disorders per se, but rather influences whether or not a patient will seek medical attention. The researchers conclude that "stress management training may be useful in reducing the frequency and severity of GI symptoms in patients without psychopathology."

"Despair is a sickness in the spirit, in the self, and so it may assume a triple form: In despair at not being conscious of having a self . . . a despair at not being willing to be oneself; in despair at willing to be oneself."

— S. Kierkegaard

Happy Wives Have Fewer Colds

A study of 38 married women and an equal number who had been divorced or separated up to six years revealed that the strength of the immune system generally paralleled how the woman felt about her relationship. All the subjects received a similar viral or bacterial challenge and immune system responses were measured. Happily wed women had much stronger immune systems than those with "sour marriages." The sixteen women who had been separated a year or less had much lower immune responses than married women of the same age and social background. Natural killer cells, which help fight viruses and tumors, were 40% lower and helper T cells, which stimulate antibody production, were 20% lower. In separated or divorced women, the first year appears to be the most stressful since it is the time that requires most new adjustments. Separated or divorced women who still had fairly strong attachments to their ex-mates, had less impairment of immune system function.

"Intelligence has a lot to do with what folks believe. Those with smart kids, for example, are likely to believe in heredity." — Frank Clark

Career-Family Stress In Men

Much has been written about the stress of working wives who have to juggle homemaking and parenting responsibilities with job duties. According to one recent report, however, "many men are learning that being a good parent and having a demanding career are often mutually exclusive." In a survey of 1,600 employees, almost as many fathers as mothers — 36% vs. 37% — reported feeling a "lot of stress" in balancing their work and family lives. In fact, only 11% of the work force consisted of married males with wives at home full time. One specific area where men experienced more stress was when child-care duties forced them to miss work. In another large survey, two-thirds of the men said that family concerns had affected their work goals and plans and that promotions and transfers were often passed up because of the need to spend more time with their families. While many companies now offer unpaid parental leave of up to six months for child-rearing, education, and other purposes, such plans do not seem to be very popular. In one Chicago-based utility whose 18,000 employee work force is 80% male, 300 women but only 25 men applied for child-care leave in the past three years. In over 384 large companies offering unpaid leave time to fathers, only nine reported that the benefit had been used. Among those with established paternal leave policies, almost half didn't sanction using them and one human resource director suggested that applying for paternal leave might adversely affect one's career. As a consequence, although more than half of husbands did take off a week or so after the birth of their last child, such absences were usually marked off to sick time or vacation. Status differences at work also appear to play a role. "Men in management and higher paid jobs have more freedom to act in accordance with changing awareness."

Mental Arithmetic Stress— Physical or Psychological

Attempts to study psychosocial stress in the laboratory setting frequently utilize mental arithmetic in problems which require a verbal response. Thus, in addition to the psychological challenge, a certain degree of physical effort is required which might also influence cardiovascular responses. To examine this further, two tasks were performed in a counterbalanced order. The psychological task consisted of a set of mental arithmetic problems for which verbal answers were required. The physical task mimicked the speech demands of the psychological task but required no arithmetic stress. Heart rate increased in both situations but was greater with psychological stress. In both instances, maximum heart rates were obtained after about 50 seconds into the task and then declined. The subjects were asked to rate the difficulties of both tasks and almost uniformly described the physical task as having almost no difficulty in contrast to the psychological task which was rated as having intermediate stress. This study suggests that the physical demands of response verbalization may account for a substantial amount of the increase in heart rate seen in mental arithmetic laboratory stress studies. Since this may vary with each individual, the interpretation of results should take such factors into consideration.

Coronary Heart Disease Less Severe In Those with Strong Social Ties

Severity of coronary atherosclerosis was evaluated in 159 patients who underwent angiography because of suspected coronary artery disease. Psychosocial interviews revealed that the degree of arteriosclerosis tended to be less severe in patients who reported that they felt loved and received considerable support from family and friends. The size of the individual's social network did not appear to be as important as the functional benefits that the close personal ties provided. Strong feelings of being loved were associated with relatively mild disease and patients who reported getting little practical support also demonstrated the most severe degrees of coronary arteriosclerosis.

The Health Benefits of Altruism

"Altruistic egoism," which Selye defined as doing something you enjoy that benefits others, may be a powerful stress buffer and seems to provide surprising health benefits. Volunteer work is a good example as some 90 million Americans have already discovered. A 10-year study of some 2,700 people in Tecumseh, Michigan, revealed that men who did no volunteer work were two and a half times more likely to die than those with a history of donating their services to others. Of course, the question may be raised that people who volunteer are happier and healthier to begin with, but most researchers feel that providing helpful services to others provides a strong antidote to stress and other health benefits. This appears to be particularly true in the case of individuals whose work activities provide no sense of pride and fulfillment. Volunteer work and similar services can enhance self esteem and result in a rewarding sense of accomplishment and competence. Often individuals with emotional problems find that helping others with similar difficulties is particularly beneficial, which may account for the success of groups such as Alcoholics Anonymous, Narcotics Anonymous, Gamblers Anonymous, Neurotics Anonymous, etc.

More and more retired and elderly individuals are devoting their spare time to helping others. One popular activity is the Foster Grandparents Program in which volunteers over 60 are teamed with children who are emotionally or physically handicapped, abused, or neglected. They regularly visit with the children, try to involve them in creative projects and learning experiences, or attempt to develop artistic and mechanicsl skills that may eventually provide a source of income. Younger individuals often achieve a similar sense of accomplishment by involvement in activities such as the Peace Corps and VISTA (Volunteers In Service To America).

"Happiness is not something you experience; it's something you remember" — Oscar Levant

Depression and Cancer In Middle-Aged Men

A recent 20-year follow-up study of over 2,000 middle-aged men revealed a strong link between depression and death due to cancer. The project began in 1957 when males between the ages of 40-55 underwent a thorough physical examination and depression was assessed using the MMPI. They were reexamined annually and follow-up for mortality was completed in 1979. There was a positive association between depression which had been recorded in the initial screening and the subsequent incidence of cancer over the next 10 years. However, there was a much stronger association between depression and death due to cancer over the full 20-year period. This observation suggests that depression may be more influential in promoting the spread of malignancy rather than contributing to its onset. The association between depression and cancer persisted even after adjustment for age, cigarette smoking, alcohol consumption, occupational status, family history of cancer, etc. None of the other MMPI scales or particular personality types appeared correlated with cancer incidence or mortality. However, other studies have suggested that the Cook-Medley Hostility Subscale of the MMPI also shows a correlation with cancer mortality.

Expression of Anger and Cardiovascular Disease

While Type A behavior has clearly been identified as a major risk factor for coronary heart disease, certain components may be more responsible than others for this correlation. Although some studies suggest that hostility and cynicism are the culprits, there is some question as to whether the scales used actually measure hostility as opposed to competitiveness and rigidity. Also, so called hostility scores seem to correlate with overall mortality, rather than deaths due to heart attacks per se. There is increasing evidence that anger and its expression may play a pivotal role in the hyperactive cardiovascular reactivity characteristic of Type A's. In one recent study, using a video game played under conditions of increasing challenge, repressed anger appeared to be the most consistent determinant of cardiovascular reactivity in Type A adolescents. Systolic blood pressure elevations in the video game were consistently associated with repressed anger and "explosive" speech. Other more refined measurements of state-trait anger and anger-in, anger-out tendencies also suggest that the degree of anger as well as its expression or repression may be the personality trait that best determines risk for heart attack. High levels of anger, especially when directed inwardly, appeared to be the most important risk factor in patients with a confirmed acute myocardial infarction when compared with an equal number of age-sex matched controls. Differences between the two groups in global Type A rating were not significant.

"Idealism increases in direct proportion to one's distance from the problem."

— John Galsworthy

Book Reviews • Meetings and Items of Interest

Book Reviews

Issues and Trends in Health, Carison, R.J., and Newman, B. (eds), C.V. Mosby, St.Louis, 1987, xxx pp. $25.95.

As noted in the introduction by Jonas Salk, we are witnessing an increasing shift from disease control and treatment to an emphasis on health maintenance and enhancement. Evidence of this revolution is vividly corroborated by the explosion of interest in diet, vitamin and nutritional supplements, jogging, walking and all sorts of exercise and fitness activities, stress, reduction, environmental pollution, and a host of "do it yourself" measures that serve to emphasize that personal health is the individual's responsibility. Understandably, all sorts of special diets, exercise routines, strategies for mental and physical relaxation, mind expanding, spiritual fulfillment programs, etc. have sprung up, all making extravagant claims. Some are offered by well meaning zealots but many othrs are primarily money making schemes. Some spurious approaches may achieve beneficial results in certain patients because of a placebo effect, making it difficult for consumers as well as health professionals to separate the wheat from the chaff. Another problem that has emerged is that the tidal wave of naturopathic, holistic health and selfhelp approaches may prevent patients from receiving vital medical care in cases of cancer and cardiovascular disease. This concise volume provides a useful guide in sorting out such problems and is divided into eight sections that cover both theoretical constructs and practical experiences. These include benefits and limitations of self-help measures, psychosocial and physico-chemical environmental influences, stress management, nutrition, and diet, exercise, etc. The largest section deals with such specific health problems as substance abuse, alcoholism, smoking and other addictive behaviors, alternative cancer therapies, special problems confronted by adolescents and the elderly, prescription medications, etc. A final ninth section provides an excellent bibliography. The forty chapters are all authored by well known experts in their respective fields, and there is surprisingly little repetition in a multiauthored work such as this. This is a tribute to the editors, who should be congratulated for compiling such a comprehensive and much needed guide for these complicated issues.

Meetings and Items of Interest

Feb. 28-March 3, Behavioral Medicine, Harvard Medical School, Department of CE, Ritz Carlton, Boston, (617) 732-1525.
March 6-12, American Holistic Medical Association Annual Conference, Seattle. Contact AMHA (206) 322-6842.
March 8-11, American Psychosomatic Society Annual Meeting, San Francisco. Contact American Psychosomtic Society, 6728 Old McClean Village Drive, McClean, VA 22101, (703) 556-8729.
March 14-18, Psychological Trauma; Clinical Psychopharmacology, Harvard Medical School, Department of CE, Aruba, Netherlands Antilles, (617) 732-1525.
March 20-22, The Third Annual Symposium on Psychiatric Medicine, Florida Hospital center for Psychiatry, Orlando, (407) 897-1800.
March 20-24, Introduction to Medical Hypnosis: The induction and utilization of hypnosis in medical practice. University of California, San Diego. La Jolla (34 hours). (619) 259-6790.
March 29-April 1, Society of Behavioral Medicine Annual Meeting, San Francisco. Contact Judith Woodward (615) 974-5164.
March 31-Apr. 2, Guided Imagery for clinicians: An Intensive Training Program, Newport Beach, CA, The Institute for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
April 2-7, Biological Aspects of Non-Psychotic Disorders, World Federation of Biological Psychiatry, Jerusalem, Israel. Write to P.O. Box 983, Jerusalem 91009, Israel.
April 7-9, Helping People Change: Practical concepts and treatment strategies for the health professional, Chicago, The Institue for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411. **April 7-9,** The Positive Power of Humor and Creativity, Saratoga Springs, NY. (518) 587-8770 or Humor and Creativity Conference, 110 Spring St., Saratoga Springs, NY 12866.
April 7-9, Behavioral Healthcare Tomorrow, Los Angeles Institute for Behavioral Healthcare, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
April 10-14, Coping with Stress and Anxiety, Temple University, School of Medicine, Sarasota, Fla. (813) 388-1766.
April 10-14, Introduction to Medical Hypnosis. The induction and utilization of hypnosis in medical practice. University of California, San Diego. La Jolla (34 hours). (619) 259-6790.
April 19-23, Association for the Advancement of Health Education, Boston. Contact Linda Moore (703) 476-3437.
Apr. 24-26, Stress Management Workshop, McMaster University, Hamilton, Ontario, Canada, (416) 525-1940.
April 27-29, Healing the Heart: Advances in the Prevention and Treatment of Coronary Heart Disease, boston, The National Association for the Clinical Application of Behavioral Medicine, Box 523, Mansfield Center, CT 06520, (203) 456-6000.
April 28-29, Cognitive Behavior Modification: Effective interventions with adults, children and adolescents, Dallas Institute for the Advance of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
May 4-5, Cognitive Behavior Modification: Effective interventions with adults, children and adolescents, Pittsburgh Institute for the Advnacement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
May 4-7, The Power of Laughter and Play: Applications in Health, Business, Education, Relationships and Lifestyle (Steve Allen, Sid Caesar and Steve Allen, Jr., M.D., Rich Caesar, M.C.), Long Beach, CA. The Institute for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
May 5-7, Guided Imagery for Clinicians: An Intensive Training Program, Seattle, WA, Institute for the Advancement of Human Behavior, Seattle, WA. The Institute for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
May 12-13, Cognitive Behavior Modifications: Effective interventions with adults, children and adolescents, Washington, D.C. Institute for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
May 18-19, Cognitive Behavior Modifications: Effective interventions with adults, children and adolescents. Minneapolis, MN, Institute for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
June 1-3, Cognitive Behavior Modifications: Effective interventions with adults, children and adolescents. Pittsburgh, PA, Institute for the Advancement of Human Behavior, P.O. Box 7226, Stanford, CA 94309, (415) 851-8411.
June 4-9, The Power of Art: Humanism, Healing and Health Care. Kuai Foundation for Continuing Education, Poipu, Kuai. Contact David Elpern, M.D., P.O. Box 3650 Lihue, HI (808) 245-3351.
June 6-8, The Ecology of Work: Improving Productivity and the Quality of Work Life. Cincinnati, OH. Contact Tom Chase, R.R. #2, box 44a, Northwood, NH 03261.
June 26-Sept. 1, Tenth Cape Cod Institute (Daily morning series of lectures on Neuropsychology, The Relaxation Response, Diagnosis and Treatment of Sexual Problems, Children of Divorce, Adolescents in Trouble, Clinical Hypnosis, Marital therapy, etc.) Cape Cod, MA. Contact Dr. Michael Peters, Albert Einstein College of Medicine, 1303 Belfer Bldg., Bronx, NY 10461 (212) 430-2307.
Oct. 23-25, The Ecology of Work: Improving Productivity and the Quality of Work Life. Toronto, Ontario. Contact Tom Chase, R.R. #2, Box 44a, Northwood, NH 03261.
Dec. 3-7, International Round Table on Silent Myocardial Ischemia. For detailed information contact the Congress Secretariat, Tel Aviv; contact Kenes Ltd., P.O. Box 50006, Tel Aviv 61500.

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