

The Newsletter of THE AMERICAN INSTITUTE OF STRESS

Number 7

1990

Stress and Skin Disorders

The skin is the largest organ of the body and often a sensitive barometer of stress. Some people blush when they are anxious while others become pale. Hives, itching, eczema, acne, and psoriasis have all been reported to flare up under conditions of emotional stress and recent studies show a scientific basis to support this. In general, skin inflammations are due to accumulation of white blood cells in the tissues just under the surface of the skin and these can appear as red, scaly or swollen spots. What causes white cells, which normally circulate in the blood stream, to migrate to the skin has never been fully explained. New studies show, however, that an immune system cell, known as the mast cell, may open the door. It is believed that under conditions of anxiety or stress, chemicals are produced by nerves in the tissues that trigger mast cells to release little granules that cause the white cells to stick to the walls of blood vessels resulting in an inflammatory response. Doctors believe that they can design treatments which will prevent inflammation by inhibiting the release of these granules, rather than current approaches which are designed to reduce the inflammation after it occurs. These new findings confirm that "at least in the skin, immune responses are controlled to some extent by state of mind and emotional status." It is likely that similar mechanisms are involved in other stress-aggravated

conditions such as irritable bowel syndrome and asthma.

New York Times, 11-21-89

More on Stress and Diabetic Control

Stressful situations are generally accompanied by an elevation in blood sugar as part of the "fight or flight" response to provide more energy for life-saving activities. The immediate release of adrenalin causes the breakdown of glycogen to sugar, and the subsequent release of cortisone-like hormones causes further increases from protein stores in the body. Stress may also upset diabetic control by causing some changes in self-care and compliance, including forgetting to take medication or insulin, dietary excesses, increased alcohol intake, etc. Some studies have shown that acute psychological stress such as mental arithmetic tasks or public speaking may cause marked changes in blood sugar, but these vary considerably in different individuals. Other research suggests that stress reduction relaxation techniques, such as hypnosis, biofeedback, and meditation can improve diabetic control and reduce insulin requirements. In addition, many associated gastrointestinal complaints of nausea, diarrhea, constipation, or bloating are often due to stress-related depression and anxiety, rather than diabetic neuropathy. Physicians, health care workers, and patients need to be more sensitive to these influences and recognize their important effects on both diabetic control and quality of life.

Internal Medicine for the Specialist, September 1989

ALSO INCLUDED IN THIS ISSUE

More Hi-Tech Toys for Stress Reduction.....	2
Stress and Diverticulosis	2
Spontaneous Cancer Remission, Stress and Immune Function	3
The Effect of Menopause on Responses to Stress	3
Coping with Daddy Stress	3
Relieving the Stress of Elder Care	4
Is There an Arthritis Personality?	4
Fame Means Stress	5
Stress Reduction Prolongs Life after a Heart Attack	5
Stress and Addictive Behavior	5
Stress-Related Irritability and Suicide	6
Finding Ways to Predict and Prevent Stress	6
Coping with Retirement	6
Is There a Type C Cancer Personality?	7
Tuning In TV to Tune Out Stress?	7

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.

The Newsletter of THE AMERICAN INSTITUTE OF STRESS NEWSLETTER is published monthly by The American Institute of Stress. Subscription rates: \$35.00 annually. Copyright© 1987 by The American Institute of Stress. All rights reserved.

The Newsletter of
**THE AMERICAN INSTITUTE OF
 STRESS**

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

**Contributing Editors from The Board of Trustees of
 The American Institute of Stress**

Robert Ader, Ph.D., Rochester, NY
Herbert Benson, M.D., Boston, MA
Norman Cousins, Los Angeles, CA
Michael E. DeBakey, M.D., Houston, TX
Joel Elkes, M.D., Louisville, KY
John Laragh, M.D., New York, NY
James J. Lynch, Ph.D., Baltimore, MD
Kenneth R. Pelletier, Ph.D., M.D., Berkeley, CA
Ray H. Rosenman, M.D., Menlo Park, CA
Charles F. Stroebel, Ph.D., M.D., Hartford, CT
Alvin Toffler, New York, NY
Sue Thomas, RN, Ph.D., Baltimore, MD

More Hi-Tech Toys For Stress Reduction

The stress-reduction device business is booming with tension-taming tools, relaxation chairs, computerized massage tables, whirlpool waterbeds, soothing sound machines, portable home saunas, videos, computer software, and a variety of gadgets. "Touchy-feely" furniture is the latest in anti-stress chic and includes electronic massage tables with upholstered rollers designed to deliver a gentle massage to specific areas and a built-in micro computer which allows full body or localized massage with or without heat. If the \$3,000 price tag is too steep, for little more than half of that you can get a microchip chair that "shakes, shimmies and soothes back, shoulder and neck muscles with its vibrating cushions and rotating rollers." It can also be programmed for local or full body massage, vibration intensity, degree and speed of these activities and length of session by controls set in an arm rest. In addition, stereo speakers in the head rest relax the mind with soothing nature sounds while all this is going on. If that doesn't fit your budget, there are the "Wham-It" dolls in all sizes reported on previously, or a space age plastic weapon you can mount on the dashboard of your car to "zap" other motorists. Nothing really happens, but the three-button option provides a selection of realistic sounds reminiscent of Star Wars that allows you to vent your anger and frustration in innovative ways. A few years ago, a popular device allowed you to scream into it at the top of your lungs without disturbing the next door neighbors.

The latest entrant is the "Tear-Apart" Stress Doll which is made to have its head and limbs conveniently ripped off (easily reattached with velcro). There are several models which sell for \$20-\$25 that allow you to get back at a golfer, lawyer, referee, umpire, boss, or TV hog, and "they don't cost a detachable arm and leg."

Sky, November 1988; MD, May 1990



Stress and Diverticulosis

Diverticulosis is a common disorder in the elderly. Little pouches or diverticula appear in the colon as the normal pressure of the intestinal contents produces bulging at sites of weakened musculature. In other patients with repeated spasm of the colon, little overdeveloped bands of circular muscle can develop through which the inner lining herniates. This latter type appears most often in the sigmoid colon, and it has been proposed that it develops as a result of stress-induced attacks of spastic colon. When diverticula become inflamed, infection results, giving rise to diverticulitis. Radiologists performing barium enemas in such patients have often noted that painful symptoms can be reproduced, and associated spasm of the colon can be visualized in the affected area. It is well known that functional abdominal pain is often stress related due to colonic spasm. However, whether or not this can be sufficiently frequent or severe to cause the development of diverticulitis is questionable. Diverticular disease is more commonly seen in Western cultures and has been attributed to a relative lack of fiber in the diet. In primitive high fiber consumption populations, diverticulosis is uncommon. However, others have pointed out that such

individuals also lead comparatively stress-free lives, and that it may be a combination of stress and diet that is really responsible for their protection from diverticulosis, as well as other stress-related disorders like coronary heart disease.

JAMA, 255:3366, 6-27-86

"The tendency of modern science is to reduce proof to absurdity by continually reducing absurdity to proof."

— Samuel Butler

Spontaneous Cancer Remission, Stress and Immune Function

Two decades ago, 176 documented cases of spontaneous disappearance of some twenty different forms of cancer were reported. Patients were selected only after they had met very rigid criteria, and there was no obvious explanation or mechanism of action that seemed common to all. The researchers commented at the time that this remote possibility might be of some psychological or psychotherapeutic value in patients with inoperable cancer or who could not be treated by conventional therapy. More recently, a survey of the literature revealed more than 3,000 cases of spontaneous remission from cancer and other fatal disorders. Fifteen percent had received no form of medical treatment. The fact that spontaneous remission of cancer can and does occur gives credence to the notion that the body has innate resources to stimulate its immune system to destroy cancer cells and other pathogens.

Some preliminary studies now suggest that relaxation techniques, humor and laughter, and operant conditioning procedures can promote enhancement of immune system. In one report, 45 geriatric residents were divided into three groups. One received progressive relaxation training, the second was provided with increased social contact, and a third received neither. Those receiving relaxation instructions or social support were seen three times a week for a month. At the end of this period, the relaxation group exhibited a significant increase in natural killer cell activity and were clinically improved compared to the other two groups who showed no change. In other studies, suggestible hypnotic individuals have been able to increase their immune system's lymphocyte production. While such observations are promising, it is important not to go overboard or to neglect time-tested therapeutic approaches in the hope that mind over matter will prevail.

Advances, Vol. 6, Pg. 68-73

"Science is the great antidote to the poison of enthusiasm and superstition."

— Adam Smith

The Effect of Menopause On Responses to Stress

Middle-aged women were subjected to a series of stressful tests, including serial subtraction, mirror image tracing, and public speaking. Heart rate, blood pressure, and stress-related hormones were measured. All of the pre-menopausal women had regular periods and were tested during the first two weeks of their cycle. An equal number of post-menopausal women had not had their periods for at least a year, and hormonal studies confirmed that they were no longer menstruating. There was little difference in the ages of the two groups. Compared to the pre-menopausal group, post-menopausal women showed greater increases in heart rate during all the stressful procedures. The speech task was considered to be particularly important because of its emphasis on social skills which involve interactions with others. It was only during public speaking that greater increases in systolic blood pressure and hormone levels were seen in the post-menopausal group. It was suggested that reproductive hormones may influence the responses of middle-aged women to stress in terms of their cardiovascular physiology.

Psychophysiology, 26:270 - 280, 1989

"When you reach the crossroads, take it."

— Yogi Berra

Coping with Daddy Stress

The term "working mother" suggests conflict, whereas "working father" would appear to be a redundancy. That's rapidly changing as working parents increasingly see the need to share child rearing and household duties on a more equitable basis. Corporations are also recognizing this and increasingly offer parental leave, flex time, part-time or working at home. This may be particularly valuable for divorced or widowed working fathers. However, it may be a source of stress for others who feel that taking paid time off to attend a baseball game or ballet recital, or staying home with a sick child may not be viewed kindly by their bosses and could interfere with future advancement. Although a 1987 survey of 350 companies revealed that 40% offer up to seven months paternity (continued on page 4)

Coping with Daddy Stress

(continued from page 3)

leave following the birth of a child, it is not utilized for fear of developing an image as a wimp. Legislation recently passed both houses of Congress that would require businesses with 50 or more employees to grant fathers as much as 12 weeks of unpaid annual leave for assistance with child care but is expected to face a presidential veto because it may pose economic hardships for employers.

*Gannett Westchester 12-12-88, Wall Street Journal 2-5-89,
USA Today 6-15-90*

"Don't try to innovate for the future. Innovate for the present!"

— Peter E. Drucker

Relieving the Stress Of Elder Care

Census officials predict that by the middle of the next century, one out of every four Americans will be over the age of 65. Elderly individuals tend to have more debilitating and chronic health disturbances, and often the burden for their care falls on children and relatives who experience a variety of difficulties in coping with such problems. This is particularly true when an elderly parent living a considerable distance away and alone suffers a fractured hip or develops a prolonged illness requiring constant attention and care. There may also be sticky situations with older relatives such as concerns that they should not be driving but difficulty in convincing a stubborn parent to utilize alternative transportation. A variety of elder care advice companies are cropping up, some of which offer national consulting networks that provide long distance emergency advice. Others market their services to companies as an employee benefit for workers with aging parents. Corporation elder care consultants are typically paid at a fee ranging from \$5.00 to \$15.00 per worker per year. The actual costs of care are still borne by the worker, but as one employee noted "our goal is to solve the employee's problem as quickly as possible, to help them achieve a stable arrangement, and to get them back to work." One company which provides such elder care advice for its 2,200 employees notes "we have faith that anything we can do to remove stress and worry from our employees will help us." IBM, AT&T, Aetna Life and Casualty, Travelers, Colgate Palmolive, Johnson & Johnson, Time Warner, and

U.S. Sprint are among the many organizations now providing this type of benefit. This proved to be an important issue in the contract negotiated last year between AT&T and the Communication Workers of America and in recent bargaining between Boeing and its Machinists Union.

At IBM, in the first year and a half since the program was instituted, some 11,000 requests were processed. Most of these dealt with the problems of relatives living more than 100 miles away. Current estimates are that as many as five percent of a company's work force will require elder care counseling over a 12-month period.

The Wall Street Journal, 11-17-89

"Lord, grant that I may always desire more than I can accomplish."

— Michelangelo

Is There an Arthritis Personality?

There is increasing evidence of the effect of stressful emotions and certain personality characteristics on immune system function. This appears to have important implications for patients with AIDS, herpes, cancer, and other viral linked disorders. Rheumatoid arthritis is thought to be due to an autoimmune disturbance, and the question has been raised as to whether or not there may be specific personality characteristics which might predispose to this problem. One study, which compared women with rheumatoid arthritis and their sisters, suggested that the arthritis patients demonstrated more of a tendency towards self sacrifice and had difficulty in expressing negative emotions, particularly anger. Similar behavioral traits have been linked with a greater incidence of malignancy. However, critics point out that much more research is needed to resolve whether such personality traits precede the disease — or vice versa.

Mind/Body Health Digest, Volume 2, No. 4.

"We must always have old memories and young hopes."

— Arsene Houssaye

Fame Means Stress

That was the title of a recent *Psychology Today* article. As one psychiatrist noted, people who experience sudden and unexpected fame, "can have awful problems, particularly if they are young and from a background where they didn't have money growing up." The problem has become particularly apparent in young athletes who suddenly have special favors and attention thrust on them and are often doomed to a life of drug and other addictions. The same is true of lottery winners. In New York, a self-help group known as "The Millionaire Circle" was formed to help those who achieved instant wealth beyond their dreams to deal with normal people, nagging family members, and an entity which they have termed "post lottery depression syndrome." Celebrities frequently cannot have private lives and too often the problem is that they "expect to get attention, not give it, so there is enormous emotional deprivation for the children." This can present problems when they want to do such normal things, as attending public events or going shopping without being besieged by fans. Other stresses come from the constant need to maintain their status and the fear that they will not be as famous or well known or as wealthy in the next two or three years.

Often, when fame declines, so-called friends and even close relationships tend to disintegrate and disappear, adding to problems of loneliness, depression and despair. Being famous interferes with normal social relationships, and one study of 81 famous women revealed that only seven were able to combine their careers with a successful marriage and children. In another survey of 164 stars who died between 1964 and 1983, the rate of suicide was four times higher than that of average Americans. Problems also extend to the children of famous people, who are often deprived of normal childhood or are expected to imitate the success of a parent. Another problem faced by celebrities is that they are often cast in the personality type of the individual they portray, so that they lose their own identity. In addition, while many celebrities are known by more than 90 percent of the public, they are often disliked. Rona Barrett, David Frost, and Richard Simmons fall into this category. For example, even though 81 percent of the public know who Madonna is, 85% of them don't like her, and Roseanne Barr may be worse.

In addition, American tastes are changing. Twenty years ago, a magazine would sell simply if stars were on its cover, but people are tired of that and apparently more interested in family and community. *People Magazine* reported that the cover story

about Baby Jessica, the Texas toddler who was retrieved from the bottom of the well due to a community-wide rescue effect, was their largest selling issue of the year. Sidney Biddle Barrows, who became famous for her high class call girl business which earned her the title of "Mayflower Madame," noted that "most people who are famous have worked hard to become a celebrity." In her case, she never wanted to be famous, and doesn't like it, because she no longer has any privacy, and has to pick a chair facing the corner in a restaurant, so that she doesn't have to spend the evening watching everyone look at her.

Psychology Today, December, 1988

"Most men pursue pleasure with such breathless haste that they hurry past it." — Kierkegaard

Stress Reduction Prolongs Life after a Heart Attack

A large ongoing study has shown that "behavioral changes can prevent repeat heart attacks" according to a recent report. Over a thousand individuals who had suffered a coronary were divided into two matched groups and followed for four years. One group received instruction on reducing medical risks in accordance with the latest conventional recommendations including reduction of hypertension, smoking, cholesterol, fat consumption and obesity. The others attended classes designed to lower Type A behavior and stress. Among the findings were that "those who learn to relax are 50% more likely to survive." Of interest was the observation that women who scored lowest in hostility appeared most apt to succumb to a repeat heart attack whereas in men it was just the opposite. The researchers postulate that such women may have a tendency to be depressed since they are not able to express their anger and direct it inward. Other risk factors for females were more than two kids and clerical jobs.

USA Today, 4-20-90

"Let your advance worrying become advance thinking and planning." — Winston Churchill

Stress and Addictive Behavior

"Mix stresses of the modern world with the genetic, physiological or psychological predispositions and the person becomes at risk of becoming addicted to substances or things" according to one (continued on page 6)

Stress and Addictive Behavior

(continued from page 5)

certified addiction counselor. A variety of addictions are apparently increasing, including illicit drugs, alcohol, nicotine, caffeine, coffee, and even sugar. However, in addition to these physical agents, there has also been an increase in workaholics, compulsive spending and gambling. More recently, attention has been devoted to sex and love addiction, TV addiction, compulsive overeating, and even exercise addiction. It is also postulated that Type A individuals have become addicted to their own adrenalin secretion, and unconsciously seek ways to reach an adrenalin high.

Many of these addictive states are mediated by or share common abnormalities in serotonin and endorphin neurotransmitter activity. According to some, we tend to live in an age of instant gratification and have become a society of pleasure seekers. Others suggest that such addictions really stem from feelings of incompleteness, or the belief that we must find something outside of ourselves to make us complete. A variety of self-help groups have sprung up to deal with various manifestations of this problem. Medications, including antidepressants which affect serotonin mechanisms, may also provide significant benefits, as can appropriate psychological counseling.

Gannett Westchester Newspaper, 5-16-89

"Test fast, fail fast, adjust fast."

— Tom Peters

Stress-Related Irritability and Suicide

A forty-year study suggests that "increased irritability in response to stress may be a long-term predictor of suicide." Medical students from Johns Hopkins between 1948 and 1964 completed a "Habits of Nervous Tension" questionnaire consisting of 25 items designed to characterize reactions to stressful situations. Of the 1,046 men who participated in the study, thirteen later committed suicide, as did 4 of the 96 females. Retrospective analysis revealed that those at risk for suicide tended to have increased irritability as a result of concerns about who was to blame, generally wanted to be alone, and complained more of urinary frequency, difficulty sleeping, and loss of appetite. The increased irritability responders had a six times greater risk for suicide. Urinary frequency in response to stress was the next best predictor, and those whose reaction to stress was to seek solitude, were three times more likely to take their life.

Difficulty in sleeping and loss of appetite responses to stress were associated with a 2.5 greater incidence of suicide.

Internal Medicine News, Oct. 1-14, 1988

"Man cannot remake himself without suffering. For he is both the marble and the sculptor."

— Dr. Alexis Carrel

Finding Ways to Predict And Prevent Stress

Some researchers think that tendencies to react adversely or in an exaggerated fashion to stress can be detected early in infancy and that strategies can be developed to prevent such harmful responses. In studies of children suddenly exposed to a strange group of other youngsters, it has been noted that some quickly join in activities, while others, who are up tight, do not participate and withdraw. By simultaneously measuring heart rate, blood and salivary hormones, it was shown that anxiety and stress levels were the highest in the latter group. Similar experiments are also being performed on rhesus monkeys. They mature four times faster than humans, so that a generation can be observed in four or five years rather than twenty. To date, these studies suggest that responses to stress may be inherited. In addition, it would appear that developing appropriate coping strategies early in life can provide future protection in dealing with stress. This might include bringing a friend along if faced with the prospect of a new and uncertain situation. Alternatively, if you know that you are going to a potentially stressful experience, it may be helpful to plan ahead by determining exactly what you will say and do before it occurs.

USA Today, 5-4-89

"You do not need to shout if you use the right words."

— Anonymous

Coping with Retirement

Many Americans are finding that the pot of gold at the end of their retirement rainbow has become a little tarnished. This appears to be particularly true for those who opt for early retirement, but eventually discover that a life of daily fishing, golf, going to the races, reading or playing cards has lost its luster. The problem may be worse for those without such hobbies, who are homebound and increasingly get in the way of their spouse who is not used to having a constant and critical companion all day long. For some, a life of unlimited leisure fails to fulfill certain needs of accomplishment and pride previously provided by their work activities. For

others, existing on a fixed income that can no longer keep pace with rising prices and unanticipated expenses proves stressful. Current estimates are that over 25% of those who retire will ultimately return to the work force in some capacity. Faced with a diminishing supply of skilled labor, many industries welcome older workers, even those over seventy, because they tend to be more reliable, have few problems with substance abuse and better skills in dealing with people than teenage applicants. The important thing to recognize is that it's not what you retire from, but what you retire to.

Modern Maturity, 11-89

"What retirement means to the lady of the house is twice as much husband on half as much income."

— The Right Hand

Is There A Type C Cancer Personality?

Nice guys finish last and some people suggest that they may also have a tougher time fighting cancer. Stifling your true feelings, keeping a stiff upper lip, giving someone the shirt off your back, and always smiling no matter what, appears to be part of what has been called Type C personalities. Researchers became sensitive to this while listening to tape recordings of melanoma patients. Almost all seemed to be unusually cooperative, without any trace of hostility, and projected a sense of serene calm. This was in sharp contrast to the recordings of Type As, who had explosive speech patterns and were obviously angry, competitive, impatient, and hostile. In further interviews with melanoma patients, it was evident that they almost never expressed anger and appeared unusually willing to sacrifice themselves to comply with any request. It was suggested that these suppressed emotions could reduce the immune system's ability to fight cancer.

In studies of other cancer patients, it also appeared likely that patients with this Type C profile, did not do as well with their malignancy and also had poor immune defenses. In a London study, personality tests were given to 57 women with breast cancer. They were followed for ten years and those who exhibited a fighting spirit and actively rejected the notion of being ill, lived significantly longer than others who simply accepted their fate. Of the Type C patients, three out of four had died by the end of the ten-year period. In the fighters and rejectors without Type C traits, however, only 40% had died and 55% were still alive with no evidence of recurrence.

In another study, melanoma patients were asked to describe past emotional experiences in detail. Those who could recall their feelings most vividly and discuss them openly demonstrated a greater

ability of their immune system to attack cancer cells, and their tumors were also smaller and less invasive. In other European research previously reported in this Newsletter, 100 Type C individuals who were at risk for getting cancer but had no signs of illness were divided into two groups. Half received stress-reduction therapy in the form of group activity, behavioral counseling, or appropriate medication and half continued their normal activities to serve as controls. When evaluated ten years later, the stress-reduction group's death rate was 26% lower than the Type C controls. This is still an area of considerable controversy, but such preliminary studies do support a link between personality and cancer. More importantly, they offer the hope that patients may some day learn how to exert a greater influence on the outcome of their illness. As another recent study concluded, "therapy aimed at making cancer patients feel less pessimistic not only improves their attitudes but also their immune responses."

Hippocrates, November-December, 1989

"In action, be primitive; in foresight, a strategist."

Rene Char

Tuning In TV to Tune Out Stress?

The average American watches more than five hours of TV daily, and as noted previously in the Newsletter, this can prove to be a stressful experience. Educators are particularly concerned since by the age of 18, the average American child will see 52,000 murders or attempted murders on TV, and for those with cable and VCR's, the number increases to 72,000, not to mention torture, or other terrifying experiences that can have serious repercussions. For some, however, TV can provide stress reduction benefits and corporate America is trying to tap into that. At Texaco corporate headquarters, a special room has been set aside near the cafeteria where 100 or more employees can lounge around and focus on a large console television, to watch soap operas. As noted in a recent article, "Television and radio are fast becoming the water cooler of the media age." A recent Nielsen report reveals that hundreds of thousands watch television each day at work. A study of over 4,000 individuals found that more than a third of TV watchers tuned in sometime during the workday. Watching television at work can provide other benefits inasmuch as more and more companies are engaged in global activities and it's helpful to get information that might affect business dealings abroad. The downside is that noise from a television or a radio can disturb those who don't want to hear it and that some workers abuse the privilege. However, Texaco reports that "a little midday entertainment or music can relieve stress and smooth out the rest of the day."

Gannett Westchester newspaper, 6-10-90; AFP, May 1990

Book Reviews • Meetings and Items of Interest

"The Mind," by Richard Restak, Bantam Books, N.Y., 1988, 328 pps., \$29.95, .

This book is based on the nine-part PBS Television Series of the same name and is presented with the same high quality of graphic excellence. It is extremely easy to read despite the discussion of highly technical subjects such as pet scanning, neuroimmunomodulation, and the brain as a computer. The range of topics is unusually comprehensive and advances in complex scientific areas are skillfully integrated into practical applications so that the reader can understand how they relate to aging, addiction, pain, healing, mood, thinking, language, and behavior. The section on depression is particularly valuable, in terms of its explanation of the mode of action of various drugs. The presentation of all these subjects is enhanced by liberal inclusion of case histories which illustrate the point being made. A useful glossary is included and although there is no formal bibliography, a list of further readings is provided to obtain more information about specific subjects. This is a state of the art presentation which is not likely to be surpassed for many years.

VIDEOCASSETTE REVIEW

"Take a Break with Priscilla Patrick," Priscilla Patrick, 3128 Carlisle Street, Columbia, SC 29205, \$19.95, .

There are a variety of popular fitness and exercise tapes readily available to the public, usually accompanied by non-stop music and a glitzy background. This videotape avoids such distractions in an effort to concentrate on the exercise itself. The entire program lasts an hour and 47 minutes and begins with an introduction to basic breathing techniques. This is followed by a 15-minute light limbering exercise routine and three subsequent half hour lessons which become progressively more challenging. The instructions are given by an experienced Yoga teacher and emphasize low intensity exercises, consisting of bends, twists, stretches, and folds. These are designed to increase flexibility, muscle tone, and strength and to provide a sense of deep relaxation rather than exhaustion. Recommended for anyone who wishes to learn something about Yoga in a stepwise and painless fashion.

Meetings and Items of Interest

August 6-10, Door County Summer Institute, Egg Harbor, WI, Columbia Hospital Psychotherapy Center and University of Wisconsin Dept. of Psychiatry, (414) 961-3448.

August 8-22, Humanism and Caring in Medical Care, Kenya, East Africa, Temple University School of Medicine, (215) 221-4787.

August 13-17, Family and Marital Dynamics; Advances in Treatment of Anxiety/Depressive Disorders, North Falmouth, MA, Massachusetts Mental Health Center, Harvard Medical School, (617) 743-1300.

August 16-19, Workshop on Clinical Hypnosis, Reno, NV, American Society of Clinical Hypnosis, (708) 297-3317.

August 17-18, Cardiac Wellness and Rehabilitation, Monterey, CA, Medical Education Resources, (800) 421-3756.

August 19-31, Pathogenesis of Neuroimmunologic Disorders, Woods Hole, MA, Marine Biological Laboratory, (508) 548-3705.

August 20-24, Hormonal Modulation of Brain and Behavior, Buffalo, NY, International Society of Psychoneuroendocrinology, (716) 877-7965.

August 27-29, Tutorial in the Tetons: Stress and the Heart, Moran, WY, American College of Cardiology, (800) 253-4636.

August 27-31, 7th Annual Cape Cod Summer Symposia: Group Psychotherapy: Healing Through Relationships, Cape Cod, MA, New England Educational Institute, (413) 499-1489.

Sept. 5-19, Women's Health for the 1990's, Kenya, East Africa, Temple University School of Medicine, (215) 221-4787.

Sept. 13-16, Workshops on Clinical Hypnosis, Kansas City, KA, American Society of Clinical Hypnosis, (708) 297-3317.

Sept. 14-16, Introduction to Medical Hypnosis, New York, NY, Society for Clinical and Experimental Hypnosis, (315) 652-7299.

Sept. 21-22, Cardiac Wellness and Rehabilitation, Atlantic City, NJ, Medical Education Resources, (800) 421-3756.

Sept. 23-27, Second European Conference on Traumatic Stress, Noordwijkerhout, The Netherlands, National Institute for the Victims of War. Contact Mirjam Bossink, P.O. Box 13362, 3507 LJ Utrecht, The Netherlands +31-30-730811.

Oct. 19-20, Cardiac Wellness and Rehabilitation, New Orleans, LA, Medical Education Resources, (800) 421-3756.

Nov. 2-4, The Severely Disturbed Adolescent: Evaluation and Management, Boston, Mass., Massachusetts General Hospital Dept. of Psychiatry, (617) 432-1525.

Nov. 15-18, Psychiatric Medicine in the 90's, Phoenix, AZ, Academy of Psychosomatic Medicine, 5824 N. Magnolia, Chicago, IL 60660, (312) 784-2025.

December 12-14, International Conference on Healthy Lifestyles, Leningrad, USSR, N. Bederova, Kirov Institute of Advanced Medical Studies, Leningrad 193015, (812) 2725206 or University at Penn, Des Moines, IA 50316, (515) 263-5582.

December 29-Jan. 1, 1991, 10th Annual Role of Exercise and Nutrition in Preventive Medicine, Breckenridge, CO, ISC Division of Wellness, (813) 686-8934.

ISSN # 1047-2517

The Newsletter of
**THE AMERICAN INSTITUTE OF
STRESS**

124 Park Ave., Yonkers, New York 10703

Non-Profit Organization
U.S. Postage
PAID
Yonkers, NY
Permit No. 400