

The Newsletter of THE AMERICAN INSTITUTE OF STRESS

Number 3

1995

HAS TRUE LEISURE BECOME EXTINCT?

If work is the major source of stress, then leisure should be able to provide stress reduction benefits. However, true leisure time has definitely declined in a dramatic and progressive fashion during the present century. For many, it has essentially disappeared completely. Some may not even know or appreciate what true leisure time really means. Many assume it refers to weekends, holidays, vacations, or any time not spent on job related duties. Others view it as synonymous with recreational or family activities. However, none of these are really accurate interpretations.

The Oxford English Dictionary definition of leisure is "time which one can spend as one pleases". It is no coincidence that both leisure and pleasure are derived from the same root word in old medieval English. As the English author G. K. Chesterton pointed out, leisure has been used to describe three different things:

- 1) Being able to do something.
- 2) Being allowed to do anything.
- 3) Being allowed to do nothing.

Chesterton's favorite definition was the last, since it included complete idleness, which he viewed as the truest form of leisure.

The notion of finding some redeeming worth in doing nothing at all but lying around and loafing may seem strange to some. After all, the Protestant work ethic values work as the most redeeming and rewarding form of human activity. This might include manual labor, scientific laboratory research, creative crafts and arts, housework, or even an exercise workout at a gym. Conversely, "wasting" time by doing nothing at all, might be considered as degraded, degenerate, or possibly even sinful.

In sharp contrast and opposition to this, are those who look to the future as a time when men will be increasingly emancipated from labor in order to enjoy more leisure. A prominent proponent of this was the German revolutionary, Karl Marx. His *Communist Manifesto* invoked the laws of history to explain why the working class would inevitably triumph in their quest for more leisure time. The conservative Catholic philosopher, Josef Pieper, had similar convictions. Actually, this philosophy goes back to the Aristotelian proposal that the real goal of life is happiness. In order to achieve happiness, it is necessary to have true leisure or personal free time, as opposed to time spent in amusement or recreational activities that require the participation and direction of others.

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

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Nevertheless, it is implicit in all these philosophies that work is an essential part of life, and that perpetual hedonism is not the ultimate goal. In addition to the products and services it provides, it is work that really allows us to enjoy leisure time. As the British author Jerome K. Jerome noted, "It is impossible to enjoy idling thoroughly, unless one has plenty of work to do". Aristotle perhaps explained it best by his analogy in *Ethics* "... because we occupy ourselves so that we may have leisure, just as we make war in order that we may live at peace". The 1982 Lover Boy's hit song also reminds us that we are "Working for the Weekend".

Many writers have viewed the ability to enjoy leisure as one of the higher functions of man. Burton's *Anatomy of Melancholy* described idleness as "an appendix to nobility", and the renowned lexicographer, Samuel Johnson, similarly suggested that "perhaps man is the only being that can properly be called idle". Others have also extolled the value and virtue of the attainment of leisure, and in a backlash to the Protestant work ethic of his day, the playwright James M. Barrie cautioned, "You must have been warned against letting the golden hours slip by. Yes, but some of them are golden only because we let them slip."

Most of us think of leisure activities as something we do on the weekend, like playing golf or tennis. However, that is not true leisure time, since it requires the participation of others. Consequently, we are not free to start or stop at any time we wish, in contrast to reading a book, listening to music, daydreaming, or browsing in a used bookstore or museum. Much of our leisure time is really spent working on things that can't be accomplished because of work related obligations.

This is particularly true for many recreational activities that we tend to consider as leisure pursuits, but are often more like work. People used to "play" golf and tennis simply for sheer enjoyment. Today, we tend to "work" on our putting stroke or our serve, and the basic desire is to excel, rather than to enjoy. Many sports are pursued under peer pressure influences that suggest what style of clothing to wear, or type of equipment to use. The word "amateur", which literally meant a "lover" of a sport, has become a pejorative term, implying little skill or ability, as in "rank amateur". The designation "professional", formerly described someone who was paid for doing a job, such as a tradesman, or anyone engaged in a professional activity. The term now has a more flattering and laudatory cachet, since a "real professional" refers to one who has attained a high degree of proficiency.

Golf is a good example of the transmogrification of leisure time. Interest in golf has exploded in the past few decades, and there are not enough golf courses to keep up with the demand, despite the fact that hundreds of new ones are being built every year. This has become a very popular use of "leisure time", even though an average round can consume 4 or more hours. Afficianados who must use busy municipal golf courses often have to get up in the wee hours of the morning to guarantee a starting time on the weekend. Things have changed dramatically since the beginning of the century, when golf came to America. In the early days, a jovial, carefree afternoon on the links was an end unto itself. Today, it is apt to be a more serious commitment, sandwiched in between a hurried breakfast, performing various family chores, and preparing to go out for dinner or some evening entertainment.

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St. Andrews, the first golf club in the United States, was located in a scenic suburb of Manhattan. It used to take some members several hours just to get there by carriage or train. There was usually no prearranged foursome or match, since schedules were erratic. In addition, part of the pleasure was to enjoy the camaraderie of other members who were waiting around for someone to play with, and the opportunity to make new friends. The day was devoted to walking at a leisurely pace, relishing the beauty of nature, and engaging in idle chatter with amiable companions. Afterwards, there was the opportunity to enjoy a few drinks and share stories with other members and guests in a relaxed environment, before beginning the long, slow, trip home.

Today, we are apt to speed to a golf course that is hopefully within minutes of home, in order to be present on the first tee at a specified time to compete with others, in a match that has been arranged well in advance. In some cases, it represents an opportunity to conduct business or discuss work. We scoot around in motorized carts to get to the next shot, rarely taking the opportunity to enjoy the charm and attractions of natural surroundings, or to engage in any meaningful conversation with our companions. We are preoccupied instead with lowering our scores, and trying to complete play as quickly as possible. There are usually bitter complaints if play is held up by a slower group, and some may even skip around, to avoid prolonging what sometimes appears more like an ordeal than a delight. As Mark Twain noted, "golf is a good walk spoiled", and William Wordsworth described it as "a day spent in a round of strenuous idleness".

Wordsworth's idea of leisure, like Chesterton's, was simply the ability to lounge around and do nothing, except perhaps daydream about whatever you wished. He was also personally convinced that this complete freedom favored the creative process. Great poetry was usually not composed at the time of a stirring experience. It was more often some time later, when, in a moment of true leisure and tranquility, the powerful emotions and feelings engendered were somehow recreated. As he wrote in his 1800 Preface to *Lyrical Ballads*, poetry is "the spontaneous overflow of powerful feelings: it takes

its origin from *emotion recollected in tranquility*". A vivid example of this was his poem "*I Wandered Lonely As A Cloud*", written four years later, which describes an experience he had while walking in the English countryside with his sister Dorothy. As they came over the crest of a hill, they were stunned by the sudden sight of nothing but fields of golden daffodils, "fluttering and dancing" in the breeze. He described them as:

"Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay.
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance."

According to Dorothy's diary, they remained spell-bound for some time. However, Wordsworth did not write a word of the poem until several months later, when the original emotions experienced were spontaneously recreated as he was leisurely day-dreaming. This is described in the last stanza of the poem, as noted in the italicized lines:

"For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils."

True leisure is the luxury of being able to have a vacant mind, filled with nothing at all, free to roam and reminisce about anything. In today's time urgent, pressure cooker society, few can afford such an extravagance. As a result, many may never realize or appreciate their own creative potential.

We need to take time out "to smell the roses". However, it may be equally important to have leisure time to sustain our souls, and to recreate and relish pleasurable moments that nurture the "inward eye" that exists in each of us. When was the last time you had that experience?

Paul J. Rosch, M.D., F.A.C.P.

Editor

*"It is better to have loafed and lost
Than never to have loafed at all."*

James Thurber

Cardiac Rehabilitation For Type A's

While it seems that hostile Type A's are particularly prone to heart attacks, once this has occurred, they appear to have fewer subsequent cardiac problems than Type B's. Some studies report they are less likely to suffer recurrent coronary events, and actually live longer than matched Type B's. In one report of 160 heart attack or coronary bypass patients involved in a cardiac rehabilitation program, those Type A's who were judged to be the meanest and most hostile, improved the most, and lived the longest. One explanation may be that since they are more aggressive, they tend to work harder to get results once they become involved in such programs.

The paradoxical finding that Type A's fare better after a coronary than Type B's may also be related to the fact that the factors contributing to a second heart attack, or subsequent premature death, are quite different from those which may have precipitated the initial event. The extent of damage, associated heart failure, and rhythm disturbances, may be much more important in determining prognosis, than personality characteristics, hypertension, cholesterol, or cigarette consumption.

On the other hand, such studies can be misleading. Type A's often cannot adequately cope with the incapacitation of a heart attack. Many refuse to enter such programs, and have higher dropout rates when they do. This may reflect their resistance to attempts to provide guidance, emotional support, and stress reduction strategies. One psychologist suggests that Type A's should not be routinely enrolled in cardiac rehabilitation programs without first dealing with "the unresolved psychodynamic conflict between the covert unconscious need for dependence, and their overt hyperindependence". A cardiologist who specializes in cardiac rehabilitation after heart attacks also agrees that psychological guidance is particularly important for such Type A patients, urging that family and friends must be similarly counseled so that they do not contribute to this conflict. One problem frequently encountered is that close and

well meaning friends tend to become over solicitous and caring, while at the same time, expressing their expectation for the patient to revert back to previous, familiar, independent behaviors. "The anxiety derived from this kind of extended conflictual circumstance only puts a patient at greater risk for another heart attack".

Obviously, one should not generalize, and patients must be evaluated on an individual basis. Responses to recommendations for regular exercise or entry in to a cardiac rehabilitation program may vary considerably. Time urgent, hostile Type A's may feel that this is a waste of time. Fiercely competitive, aggressive individuals, who do get involved in regular running, could actually suffer adverse side effects, because of an intense preoccupation with improving time or distance performance that can lead to dangerous overexertion. On the other hand, some Type A's may derive significant benefits from jogging, because it provides a unique period of quiet time for personal self reflection, that allows them to reevaluate their priorities. Aerobic exercise may also help to dissipate pent up stress hormones that contribute to their anxiety. Many authorities feel that Type A's could particularly benefit from cardiac rehabilitation programs, not only because of improved cardiac conditioning from aerobic exercise, but also through the behavioral modification that often results.

Cardiology World News-April 1994

Symphony Conductors, Stress, and Longevity

Constantly being in the spotlight must certainly be stressful, but some individuals seem to thrive on it. A recent book "Why Do Music Conductors Live Into Their 90's?", attributes this to their repeated and vigorous "arm jogging". Symphony conductors such as Stokowski, Munch, Fiedler, Toscanini, and others all enjoyed long and productive lives. Sir Adrian Boult, who led the BBC Symphony Orchestra and London Philharmonic, continued a busy schedule of performances in England and Europe well into his ninth decade. However, many performing musicians, opera stars

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and public entertainers like Bob Hope and George Burns, who do not engage in such upper body aerobic exercises, also tend to enjoy unusually healthy and lengthy lives. Conversely, others whose occupational duties or leisure pursuits do include repeated strenuous activity of the upper and lower extremities, do not derive similar benefits.

A more credible explanation and common denominator may be the pride of accomplishment that such individuals derive from the visible pleasure they provide to others. Altruistic egotism, or doing something you enjoy that benefits others, is a powerful stress buffer that provides salubrious rewards. This makes sense from a teleological viewpoint. Acting in concert with others to achieve some mutual goal, or to cope with a common threat, would have had survival value for our ancestors, thus favoring the perpetuation of a species so motivated.

Symphony conductors and other public performers are often under severe and constant stress because of artistic demands, frequent travel, long, arduous and erratic working hours, dealing with other temperamental artists, constant concerns about professional prowess, and coping with a capricious public or carping critics. However, this appears to be more than offset by the positive vibes and plaudits from a pleased audience, the approbation of their peers, the rewards of pride of accomplishment, and the strong social support that comes from doing something you enjoy, that also brings pleasure to others.

Townsend Letter For Doctors-November 1994

Does It Take a Sherlock Holmes To Diagnose Type A?

Apparently, you don't have to be a super sleuth. Type A behavior is a complex syndrome consisting of certain personality characteristics, traits, physical activities, and idiosyncrasies. Many of these may not be apparent until elicited by milieu challenges. Since its initial description four decades ago, there has been increasing evidence that some of these components may be more predictive

for coronary events than others. Hostility and time urgency are two aspects of Type A behavior which are believed to be particularly pernicious. They are also associated with certain distinctive overt physical and psychomotor signs that may help to identify their presence. Individuals with intense and persistent hostile feelings may exhibit grimaces and other suggestive facial expressions, brownish pigmentation around the eyes, a tic-like retraction of the upper eyelid and sides of the mouth, clenched fists, and a vocal style or laugh that has hostile overtones. Continual time urgency is often associated with similar tic-like spasms of the eyelids or shoulders, frequent blinking, excessive facial tension and perspiration, particularly of the upper lip, and a tense posture with quick jerky movements.

There are also characteristic vocal stylistics, such as talking rapidly, a tendency to hasten conversations by anticipating and completing the speech of others (prolepsis), tongue to teeth clicking, frequent sighing, or inhaling large amounts of air and releasing them in an explosive fashion in the middle or end of a sentence to provide emphasis. These signs are particularly prominent in younger heart attack patients. It is claimed that at least 4 are always present in those under the age of 65.

American Heart Journal, Vol. 126, pg. 607, 1993
Hospital Medicine-June 1994

Is There a Hormone For Monogamy and Bonding?

Field mice are small rodents commonly found in America, North Africa, and Eurasia. They are also known as prairie voles, since they make their nests in dense growth or shallow burrows in fields. One unusual aspect of their behavior is that they live in tight knit family groups. Males are strongly attached to their mates, tend to be monogamous, and are fiercely protective of their broods and nests. In addition, they take an unusual interest in grooming and rearing their young. These behaviors are believed to be due to a build-up of vasopressin in their brains during mating activities.

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Vasopressin is one of two hormones manufactured in the hypothalamus and stored in the posterior portion of the pituitary gland. In humans, it decreases the excretion of water by the kidneys, and is therefore often referred to as antidiuretic hormone, or ADH. It also causes contraction of smooth muscles in the vascular bed and gut, and is thought to play a role in maintaining blood pressure and normal peristalsis. A lack of vasopressin results in a disorder known as diabetes insipidus, which is characterized by a consistent and marked increase in urine output, and extreme thirst. This disease is entirely unrelated to diabetes mellitus, which is also characterized by frequent urination and severe thirst when not treated. However, the urine of these patients tends to be concentrated and high in sugar, or sweet (mellitus), whereas in diabetes insipidus, it is very pale and tasteless (insipid). Vasopressin (Pitressin) is the only effective treatment for diabetes insipidus. Pitressin injections have also long been used to increase intestinal motility in cases of post surgical abdominal distention, due to poor peristalsis. Researchers now suggest that it may have important and previously unsuspected effects on the brain that improve memory and concentration abilities.

Vasopressin is closely related to oxytocin, the other posterior pituitary hormone. Oxytocin (Pitocin) injections are generally used to increase uterine contractions during labor, and to reduce bleeding after delivery. It is only in recent years that oxytocin has been shown to enhance sexual behavior in animals. When injected into female rats, they arch their backs and spread their hind legs in the mating position. Males develop penile erections and have greater ejaculations. When oxytocin is injected into virgin female rats, it promotes maternal behavior. Within an hour they will build a nest, appropriate another female's pups, cuddle them, and crouch in a suckling position. Alcohol inhibits oxytocin release, and years ago, was frequently used to delay or even stop labor. In general, oxytocin secretion is inhibited during stress, but vasopressin is increased, and is a powerful stimulator of ACTH.

Although both Pitocin and Pitressin were identi-

fied early in this century, few suspected that they had any influences on behavior, and they were completely overshadowed by anterior pituitary hormones which regulate the secretion of adrenal, thyroid, and sex gland hormones. Whether the powerful emotional effects seen in laboratory animals apply to humans, is not clear. However, in one study, administering oxytocin nasal spray to young adults caused significant sexual arousal. Scientists suggest that some day, drug designers may be able to develop similar synthetic hormones to promote bonding in autistic children who have extreme difficulty in forming social attachments. Powerful aphrodisiacs are another possibility.

Science News-November 27, 1993

Townsend Letter-November 1994

Sex Hormones and Heart Attacks

Although heart disease is the leading cause of death for both sexes, mortality is higher in men than women, especially under the age of 50. Menstruating females have fewer heart attacks than males in the same age group, but such differences seem to diminish progressively following menopause. The traditional explanation has been that estrogen provides protection against heart attacks. Support for this comes from studies demonstrating that estrogen inhibits the oxidation of LDL cholesterol, the major contributor to atherosclerotic plaque. It has also been shown that administering supplemental estrogen to post menopausal women boosts their HDL levels, which could reduce risk for heart attacks. Two decades ago, it was reported that when men were given estrogen supplements, their risk of heart disease was also lowered. Conversely, testosterone was generally believed to promote heart attacks. Male type baldness, often associated with high testosterone levels, is also seen more frequently in younger heart attack patients.

Some new research studies suggest just the opposite, since testosterone levels were found to be abnormally low in heart attack patients. To examine this further, 55 men who underwent angiography to measure the degree and extent of their coronary

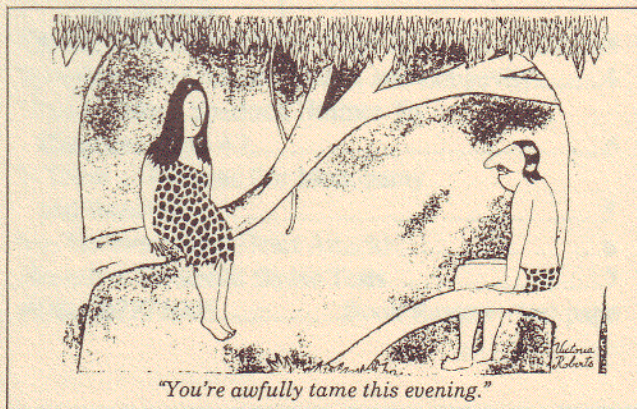
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atherosclerosis were studied. None had actually suffered a heart attack, but had symptoms suggesting that one might be impending. Researchers were surprised to find that those with low concentrations of testosterone were significantly more likely to show serious coronary clogging than matched controls with high levels. Even after other confounding factors which might have affected the results were taken into consideration, this correlation was impressive. The possibility that it was due to coincidence was less than one in a thousand. Men with higher testosterone also had higher HDL levels, which might help explain this.

Scientists now suspect that estrogen may be good for women, and likewise, that testosterone may be beneficial for men. However, the reverse may not be true. A test of this hypothesis could come from current studies to see whether post menopausal women with heart disease have higher testosterone levels than controls the same age. Additional support for the benefits of female hormones in women, and male hormones in men, may lie in future research into dehydroepiandrosterone (DHEA), a mysterious compound which seems to have "Fountain of Youth" properties. DHEA is a precursor of testosterone in men, and of estrogen in women. Levels decline with age, but are particularly low in younger heart attack patients, even when estrogen and testosterone are normal. Administering DHEA has been shown to increase the lifespan of experimental animals, retard the development of malignancy, osteoporosis, atherosclerosis, and many other manifestations of the aging process.

*Discover-10/94, Int. Med. World Report, 9/94
Science News-No. 9, 11/94*



"You're awfully tame this evening."

Mental vs Treadmill Stress Tests

Although "stress" is used to describe emotional factors and situations, a "stress test" generally refers to an exercise procedure designed to evaluate cardiovascular function. This usually consists of treadmill exercising, while heart rate, blood pressure and electrocardiographic changes are monitored. They are performed routinely to determine prognosis, cardiac status, and the degree of exercise most appropriate during recuperation after a heart attack. Emotional or mental stress tests may also be used to provide an accurate indication of cardiac reserve and to predict risk for future heart attacks. During treadmill testing, patients exercise at progressively higher levels to determine whether a specific target heart rate can be attained. The test is terminated if the subject experiences chest distress, or has electrocardiographic changes. Physical exertion greatly increases the requirements of the heart for oxygen rich blood, since it must beat much more rapidly and forcefully. Mental stress may increase the work of the heart somewhat, but can also cause coronary vasospasm, further reducing an already compromised flow of blood.

A recent report suggests that evaluating mental stress may actually be more accurate for predicting who may be at risk for a second heart attack than traditional treadmill testing. Both types of tests were administered to 136 patients with angiographic evidence of reduced coronary blood flow associated with angina or a previous heart attack. Mental stress testing consisted of delivering a five minute speech on an awkward topic to a strange audience, performing mental mathematical computations under time pressures, and tracing complex designs on a mirror. Mental stress testing correctly identified 55% of patients with documented X-Ray evidence of reduced blood flow, compared to only 43% for treadmill testing. Researchers suggest that in patients undergoing cardiac rehabilitation, the best method of predicting a subsequent heart attack may be to utilize both procedures.

Medical Tribune-May 5, 1994

Book Reviews • Meetings and Items of Interest

Book Review

BODYRHYTHMS, by Lynne Lamberg, William Morrow & Co., New York, 1994, 274 pgs., \$25.00

This book is aptly subtitled *Chronobiology and Peak Performance*. As noted in the Foreword by Dr. William Dement, a leading authority on sleep disorders, "This is the best book that has ever been written on the human journey through the nychthemeron". This obscure word refers to the entire 24-hour-day, with particular reference to the complex psychophysiological interrelationships between day and night. Part One is entitled, "How Body Clocks Work", and discusses such things as the rhythms of alertness, sleep, and sexuality. Part Two, "Mending Broken Clocks", reviews the role of circadian and other biorhythms in sleep, sickness, and health, and how this knowledge can be used effectively in the treatment of depression. The final section, "Body Clocks and Modern Life", provides an excellent discussion of why "the time is out of joint", because of jet travel across time zones, shift work, the need for some to work around the clock or erratic hours, the effect of artificial light at night, etc. There is a particular emphasis on somnology, or sleep disorders, an important area of medicine that has been seriously neglected. The Appendices contain practical information on strategies for self-help, how to keep a personal sleep/wake diary, a useful glossary to explain unfamiliar terms, and comprehensive, up-to-date references to obtain further details on any subject.

Some of the fascinating issues discussed are: how to plan your day for peak productivity, why 11:00 A.M. is the best time to hold business meetings and 2:00 P.M. the worst, the best time to eat if you want to lose weight, the best time for exercising and making love, how to prevent winter blues and jet lag, why medications for cancer, high blood pressure, asthma, and other illnesses

may be much more effective at one time of the day than another, why teenagers should be allowed to sleep late, and most importantly, what to do if you can't stay awake, can't fall asleep, or are easily awakened and remain that way for the rest of the night.

It is no coincidence that calamities such as the *Exxon Valdez*, Three Mile Island, Chernobyl and Bhopal disasters occurred at night, or that doctors, nurses, pilots, truckers, train engineers, and other workers make more mistakes during night shifts. Such individuals are also much more likely to suffer from sleep and digestive disorders, mood swings, heart disease, ulcers, and emotional disturbances, and there is a significant toll on family and social life as well. Disturbances in body rhythms represent a major public health problem as this concise practical volume explains in clear, convincing terms. Highly recommended for all whose health may be affected by disturbed body rhythms.

Meetings and Items of Interest

April 2-6 Fifth International Conference of Stress Management presents Stress at the Workplace: Health and Productivity, Leeuwenhorst Congress Center, Noordwijkerhout, The Netherlands, call +31.80.234471

April 19-23 The Third World Congress on Stress, Trauma, and Coping in the Emergency Service Professions, Sheraton Inner Harbor Hotel, Baltimore, MD, call (410) 730-4311

April 28-30 The 10th Annual International Conference on the Positive Power of Humor and Creativity, City Center, Saratoga Springs, NY, call (518) 587-8770

June 23-26 ISSSEEM Fifth Annual Conference, "Integrating the Science and Art of Energy Medicine, Boulder, CO, call (303) 278-2228

ISSN # 1047-2517

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**THE AMERICAN INSTITUTE OF
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