

ANNUAL

SELF-IMPROVEMENT

GUIDE

HOW TO LIVE FOREVER (OR AT LEAST COME CLOSE)

BY STEWART WEINER

Lest man now take also of the Tree of Life and live forever, the Lord God sent him forth from the Garden of Eden.

—Gen. 3: 22–23

The Social Security System is supposed to go bust any year now. Fourteen per cent of America's elderly live below the poverty line. The latest game for juvenile alcoholics is granny bashing, as *Time* duly reported recently. If you're over 65 and admit it on a job application, the personnel department will most likely tell you they'll "get in touch." And our senior citizens have become like fish in a barrel for street thugs. Sure, there may be plenty of good news about getting old, but the nightmares listed above are the overriding concerns for the 5,000 people who turn 65 every day in America.

So into this dandy mess strut Big Time Scientists with their test tubes and laboratory mice and experimental data—and right behind them the Big Time Entrepreneurs with their gimmicks and pills and promises, and they all seem to be saying that by the year 2020, we can expect our lives to increase by as much as 40 years. Forty more years of old age; terrific.

"There is really only one serious philosophical question," Albert Camus wrote in *Le Mythe de Sisyphe*, and that is "to decide whether life is or is not worth living." Unfortunately, according to USC associate professor of philosophy Dallas Willard, most modern philosophers have let us down on this fundamental question. "They're just not dealing with the issue; surely not the way Plato did," says Wil-

In 40 more years, we may all be living 40 more years—and the ravages of aging will be not only postponed but less severe when they occur. So why not start making things better for ourselves now?

lard. "In his work *Phaedo*, written about Socrates' last days, Plato speaks to the question, Why live? and comes up with a number of reasons. The first is theological: God put us here, and it would be wrong and cowardly to desert our station. The second reason is ethical: One reason to live is because of our responsibilities to others.

"And the third is a little more complicated: We know that we will always have the chance to die; death is inevitable. Life, on the other hand, is our only chance at living."

WHY DO WE DIE?

The average human-life expectancy has increased dramatically in the last several thousand years. Better nutrition, sanitation, education, startling technological advances and more leisure time have increased our life expectancy from 22 in the first century A.D. to a ripe old 74 in 1980. But that's the *median*—all such figures mean is that half the population still dies *before* that age. And life ex-

pectancy is not to be confused with life span, which has remained constant since the beginning of man. You've all met Dagrut Tapagua in the Dannon yogurt commercials. And Mark Twain's oldest man in the world, a Buffalo man named John Wagner who was engaged to a 102-year-old woman for 80 years until their parents finally gave their consent. There were old coots like these back in ancient Rome, too. All of them make great copy, but we can't help knowing that no matter how long we live, we are only postponing the inevitable.

"The biological limit seems to be fixed," says Dr. Leonard Hayflick, senior research cell biologist at the Childrens Hospital Medical Center in Oakland. (For his work, Hayflick was recently awarded a \$20,000 Brookdale Award from the Gerontological Society of America.) If you want to live forever, his news is nothing to cheer about.

Briefly, the Hayflick limit arises from the idea that the cell can reproduce itself only so many times until, like the 500th dubbing of an original master recording, it begins to fade. (Massive doses of vitamin E in experiments with laboratory animals do seem to increase a cell's life span, and many people—especially those who sell vitamin E—have jumped onto this finding with passion. However, it's a giant leap from a mouse to a man, and nothing conclusive has revealed itself yet.)

"Aging," continues Hayflick, "may turn out to be just another natural process, similar to puberty. We are immortal only through the passage of our germ plasm to



Lindberg:
Eat like your ancestors.

our children."

And the way we head for the Big Trip North hasn't changed much since the beginning of man, either. Essayist and surgeon Richard Selzer has written in *Mortal Lessons* that "parasites that infest us crept into our ancestors. In the fragments of earliest man we have evidence of tumors, dental caries [cavities] and joint diseases. One suspects that the reason Neanderthal man did not stand wholly erect was because he was severely afflicted with arthritis, doubtless due to his dwelling in damp caves—a disease for which, incidentally, there is no more effective remedy today than was available to him then."

No question about it; the body can close the show in a second. So can the brain—even the brains of people who jog faithfully every day, eat a consistently nutritious and conscientious diet and have never smoked a cigarette. The ironies are endless. William Harvey, for instance, the medical man who centuries ago first delineated our circulatory system, died of high blood pressure. Robert G. Dicus, the man who established a chain of local physical-therapy clinics, died recently of Lou Gehrig's disease. Adelle Davis, who nagged us all into eating right, died of cancer. And it's even rumored that George Ohsawa, the man who invented the macrobiotic diet, died of malnutrition.

So there we humans sit—somewhere between the galapago turtle that lives on for centuries and the fruit fly that barely has time to take a shower. We all have to go sometime. Or do we?

CAN WE ARREST AGING?

The hottest field in science currently is

"...I don't agree with vegetarians. I think we should give vegetables to the animals—then eat the animals..."

gerontology, the study of aging. Naturally, as our population has inched ever upward chronologically (we're now 30 on the average), we've become vitally interested in the subject. Especially in L.A., where we seem to feel an obligation not to go gentle—and certainly not flabby—into that good night. There's no dearth of people here who intimate immortality—and their intimations range from the realistic to the wholly outrageous.

GERONTOLOGY

Our new President, a senior citizen, is fond of saying that you can't solve a problem by throwing money at it. That may be true in some cases, but not at the Ethel Andrus Percy Gerontology Center at USC. (Andrus was the founder of the American Association of Retired Persons, a group with 12 million members.)

Fine Arts Building Number Two on USC's campus may be an army barracks, but the Andrus Center is an expensive, solid, multiarched affair with evidence of healthy endowments neatly accredited on lobby plaques. The center's benefactors are not just wealthy individuals; major pharmaceutical firms—such as Upjohn; Wyeth; Smith, Kline and French; and even Noxzema—have thrown money at the problem of aging. Last year's budget for the center totaled nearly \$1.5 million.

What's it all buying? Dr. Warner

Schaie, the director of the center's research institute, selected a group of 120 people over the past 25 years. He tests them periodically for their verbal skills, their use of passive and active vocabulary, arithmetic skills and inductive-reasoning ability.

"There are important differences," he finds, "between people now in their seventies and those in their thirties. People 70 or over had all the childhood diseases; people in their thirties haven't. People in their seventies have an average ninth-grade education; most people in their thirties have finished high school." Schaie reports there is very little change in test results until age 60. "If you're mentally deteriorating before 60," he says, "you can bet your buttons there's something wrong physically." From age 65 to 70 he notices some slow changes, and beyond 75 all of the people he's studied have shown *some* decline, with four out of five suffering from some kind of chronic disease.

"Some data have suggested that you can postpone aging if you're in tune with your attitude and with what's going on around you," notes Schaie. "For example, people who are isolated tend to show an earlier decline. A small group of widows with no careers, whose activities and incomes have shrunk considerably, shows the greatest decline in our studies. On the other hand, well-educated people in their seventies who are very busy and active still show modest gains in their scores."

When Schaie talks about the "reinforcements" that people who age successfully tend to have in common, he's referring not only to a comfortable economic status but to good family support and an interest in things outside of them-



USC's Schaie (left) and Willard: Where's modern philosophy when we really need it?

selves. "People so advantaged," Schaie says, "will have a high-quality old age. The ravages of aging will be postponed and less severe when they do occur. They're just not ready to cash in the chips." As Pablo Picasso once said, "I decided a long time ago to be 30."

Schaie's isn't the only gerontological game at USC, either. Other projects under way have found, for instance, that depression and forgetfulness are linked, and that part-time work for the elderly leads to a higher-quality old age. A study currently being done by Dr. Iseli Krauss has determined that an older person who is familiar with his or her neighborhood will be more likely to enjoy a vacation—or even a move to a new neighborhood. Though USC is a national front-runner in the field of gerontology, it has plenty of company on the subject.

At a recent Gerontological Society of America conference in San Diego, research presentations ranged from tooth survival of the aging male to irreversible-memory-dysfunction rehabilitation to gossip and old age. The latter, conducted by University of Georgia academicians on 156 residents of the Classic Gardens nursing home, indicated that gossip at a nursing home (to which only 4 per cent of our elderly are assigned, by the way) tended to help the mental adjustment of newcomers by the sharing of what the report called "sacred" knowledge.

Though none of the conference's scientists, clinicians or physicians were willing to offer real conclusions on the achievement of immortality, the general consensus was that the secrets of how to stop—or at least make more comfortable—the aging process would soon be revealed un-

**"...Shorter people live longer;
single people die faster; and
owning a pet helps retard
aging..."**

der the great weight of their inquiries. One breakthrough concept, for example, involves the genes.

MASTER GENE

The idea of gene transplants may soon leave the realm of science fiction and enter a more practical mode of contemplation. Many scientists think there will be earth-shaking news on this front very soon—possibly within the decade—which sounds like hype until you listen to UCLA's Dr. Roy Walford.

Walford, an immunologist, has conducted some highly respected experiments that reveal a rather startling fact: The few genes that govern our rate of aging are all located in one place. This is startling for two reasons. First, there is the excitement generated by the idea that there actually are genes that do nothing but affect aging. They resist leukemia viruses, they develop "suppressor cells" for immunoresponse, and they resist various autoimmune diseases. The other headline stuff is that, because of these genes' central locus, further experimentation is made very convenient.

Walford calls these immune-to-aging genes the Major Histocompatibility Complex (MHC), and already researchers from other disciplines are working with it. Dr. Joan Smith-Sonneborn, for example, according to *Omni* magazine, has elec-

trified the scientific world with her experiments. First she damaged the DNA part of a paramecium's cell with ultraviolet rays and then repaired it with photoreactivation. This "trickery" performed on the paramecium cell made it live longer.

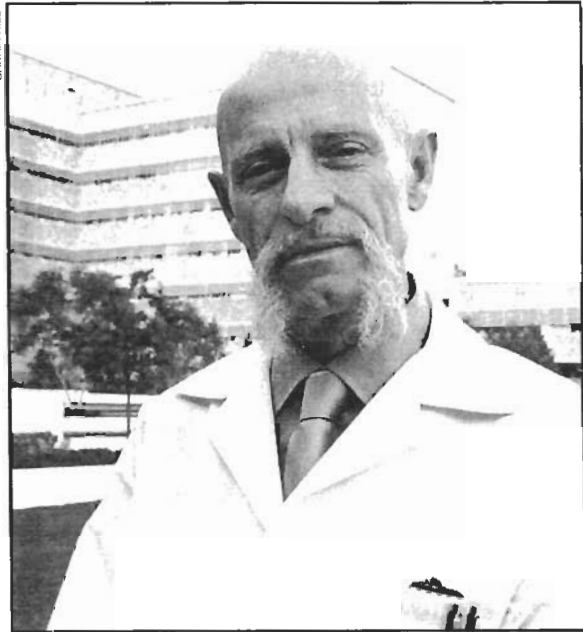
Could we apply this kind of process to the MHC? Says Walford: "If this system [the MHC] can be augmented to protect the body from aging, then we're on to something."

DIET

Surely no one needs reminding that what you eat, drink or otherwise put into your body helps determine how long that body will stick around, though the disputes over what should be consumed are as numerous as the options. And then there's the question of how much. Says Walford, "Increasing the life expectancy is possible right now—at least in animals. Laboratory studies here have shown that severe caloric cutbacks combined with nutritive supplements will cause mice to live considerably longer lives." However, he cautions, "the conclusive study on humans remains to be done."

Dr. Nathan Pritikin, founder and director of the Longevity Center in Santa Monica, has had widely reported success in increasing life expectancy through a low-fat diet for his patients—all of whom eat six meals a day. Is that the future? "Starting in 1982," Pritikin told *The Book of Predictions*, "you'll see a revolution in dietary customs in the U.S. The changes will be toward a dietary intake limiting animal protein to a maximum of one and a half pounds, with no more than 700 milligrams of cholesterol a week; fat to under 10 per cent of total calories; and protein of any

BERTAIN HILL



Immunologist Walford:
Mastering the master gene.

kind to less than 15 per cent of total calories."

Also in Santa Monica is Gladys Lindberg, who owns a chain of 10 health-food stores—Lindberg Nutrition. She claims she's 75, but she looks 50; she can grab the skin of her forearm with her long, pink nails and be unable to find any wrinkles. Surprisingly, she does *not* credit her condition to health food. Quite the contrary.

"My advice is to eat like your ancestors," she says. "My folks in South Dakota used to eat five meals a day, starting with pork chops and fried potatoes for breakfast, and they lived well into their nineties. Their food wasn't tampered with as ours is now." What does she think of someone like, say, Dr. Robert Butler, the director of the National Institute on Aging, who is a devout vegetarian and won't go near cholesterol?

"I'm not a doctor," she says emphatically, "but I can still disagree with a doctor's advice. I don't agree with vegetarians. I think you should give the vegetables to the animals—and eat the animals. And I really disagree with the cholesterol scare. Some of the research done on it, in which they fed mature rabbits lots of egg yolks which clogged the poor animals' arteries, was ridiculous. Rabbits are vegetable eaters—no wonder their systems couldn't handle the egg yolks."

EXERCISE

Tom Brokaw may sit there every morning feeling so proud of himself for running five miles—and James Fixx may have made a fortune huffing and puffing for every product he can get his agent on—but jogging has lately come under severe criticism. Says Dr. Jonathan Miller, the physician-

singer-comedian-director and now star of the PBS series *The Body in Question*, "I've seen the joggers in Central Park. The place looks like an outdoor mental hospital." And local chiropractor Garyx Zimmerman says, "Man was meant to either walk or run in fright. Man was not meant to jump up and down on hard concrete. It's bad for your spine."

Though all of the evidence isn't in yet, the experts have currently been opting for swimming as the perfect antiaging exercise.

VITAMINS AND HERBS

Back to science. Back to Dr. Linus ("Mr. Vitamin C") Pauling, the man who won the Nobel Prize in 1954 for chemistry. (Vitamin C, according to experts, is an antioxidant that retards aging by neutralizing the "free radicals"—those pesky devils that cause diseases and, theoretically, are blamed for causing old age at the cellular level.) Pauling's advocacy of C first legitimized the idea of supplementing your body's chemical formula with vitamins for a longer, better life. Now, 33 million Americans swallow vitamins every day.

Chiropractor Zimmerman, for instance, who runs the Health Affair in West Hollywood with partner Don Dickensen, who has a Ph.D. in nutrition, charges clients \$625 for a vitamin-testing and prescription program. (Not included, of course, is the cost of the vitamins.) They work by the theory, which they state sincerely, emphatically and convincingly, that most of these 33-million vitamin swallowers haven't the slightest idea what is needed by their own individual body; each one is as different as a thumb print.

"We do extensive testing of our patients

IT'S ALL A MATTER OF YIN AND YANG

BY MAURICE ZOLOTOW

Most of the attention paid to Chinese medicine lately has focused on the insertion of needles into one's body. But there is more to acupuncture than simply the relief of pain—it also can do more in the areas of rejuvenation and longevity—especially when coupled with the renowned Chinese use of herbs and elixirs. And, now, an understanding of yin and yang.

I'm sure you have all seen that symbol of yin and yang, a circle in which two fetuslike shapes are curled together, one white and one black. The white is yang and the black is yin. Yang is masculine. Yin is feminine. Yang is sky and air. Yin is earth, from which comes food. Sun is yang and moon is yin. According to ancient Chinese principles, all things under heaven and on earth partake of these energy forces which eternally flow in even or uneven rhythms—the systole and diastole of the heartbeat, the inhale and exhale of the lungs, night and day, summer and winter, spring and fall, action and reaction, all foods are either strongly yin or strongly yang, grains and vegetables and fish and fowl, all creatures great and small and the body we bring to our doctor is also divided into almost infinitesimal aspects of this curious interplay.

Chinese physician Zion Yu—whose Rejuvenation Center will open early this year on Robertson Boulevard—explains it this way: "We have yin and yang with every subject. For man the right side is yang, the left side is yin; for woman, the right side yin and left side yang. The front of man is yang and front of woman is yin."

Indeed, every part of the body has its yin and yang aspects. "If you give a patient treatment and you don't balance the yin and yang, then you might deplete him," Yu says, almost helplessly as he tries to explain these mystical concepts to one like myself oriented toward materialism and laboratory science.

"When people are off balance," he says, "they have used up their t'chi [the Chinese word for energy, or life force], and when people get to old age, the t'chi that's generating is not working properly so it does not produce enough yang to balance off the yin—thus, the physical body gets deteriorated, and the nervous system slackens down, which affects also your mental attitude. You feel negative and sad, you are not looking upward. The purpose of right side—left side balancing is to make you feel centered in yourself."

When Yu's \$600,000 rejuvenation clinic

opens early this year with a staff of 30, it will offer all the facets of healthy longevity the traditional Chinese way: San Francisco's Stephen Chen, Ph.D., whom Yu considers the best diagnostician and herbalist to be found, will be in residence two days a week to make diagnoses by taking the pulse. (Chinese doctors do not use x rays or blood examinations.) There are 14 pulses in Chinese medicine, seven in each wrist, located above, below or at the wrist bone. Taking the pulse allegedly can determine which meridians are blocked and which organs are in trouble. Chen will also prescribe herbal medicines when required. The prescriptions will then be filled by one of the many herbal apothecaries in our Chinatown.

There will be baths of varying temperatures and with various herbs for different conditions to be followed by masseuses giving "meridian therapy" massages. Then comes the acupuncture treatment, as well as daily exercise classes under the guidance of Mary Chu, or Lady Chu, a master of T'ai Chi Ch'uan, who now gives two-hour classes at UCLA Extension thrice weekly. If you don't already know, T'ai Chi is a slow and rhythmic style of body movement requiring great mental concentration, and it is quite unlike calisthenics or working with weights or Nautilus machines. It is the antithesis of running and jogging. Asians believe that it is the best way of conditioning oneself and maintaining the yin-yang balance and thus longer life.

How does this method prolong life?

"By strengthening the nerves. Take, for example, young people—no matter how much tension they are under, their nerves are so strong that all they need is a good night's sleep. When you reach a certain age, say, after 45, you still have the same nerves as a teenager, and you can make them function again if you keep in balance."

Why does he condemn iced beverages as negative?

"It is a shock to the nervous system. Body temperature is 98 degrees—the body works hard to keep that. You drink iced drinks at 45 degrees, you slow your nerve energy and create arthritis, stiff joints. Arthritis is very common in this country because people drink too much that's ice cold."

What is his recommended diet for healthy longevity?

"We recommend that people eat chicken and fish for protein—lots of vegetables, no beef, maybe once in a while a little veal. Yes,

there is a yin-yang list of foods, but it is very complicated to explain in detail." The late Yukazu Sakurazawa (a.k.a. George Ohsawa) was a Japanese disciple of oriental medicine who emphasized diet and coined the word *macrobiotic* to describe what he regarded as the ideal well-balanced yin-yang cuisine. There is an Ohsawa Foundation based in Oroville, California. Ohsawa wrote many books. You can explore some of his esoteric food theories in his *Zen Macrobiotics*, which I recently picked up at the Bodhi Tree Bookstore on Melrose.

Three vegetables are on his taboo list: potatoes, eggplant and tomatoes, which are highly yin foods. Ohsawa has a list of foods that are high and low in yin or yang elements. He devised a diet high in cereals, especially brown rice. On his diet, you went the first 10 days entirely on meals of brown rice and very little water. Ohsawa thought water and all liquids were baleful. He also had a very low opinion of fruits, soups, fish, fowl, red herring and red meat.

The most Ohsawa was willing to concede was his number-one diet. His purest was the number-seven. The number-one was 40 per cent cereals, 30 per cent vegetables, 10 per cent soup and 20 per cent fish or fowl.

What about vitamins?

"Vitamins are very good, especially for older persons. But do not take vitamins on an empty stomach. Some people think if vitamins are taken on an empty stomach, they go directly to the organs. No—the stomach digests the vitamins, and so you digest nothing but chemicals, which is harsh for the stomach and hurts delicate tissue."

Finally, what is his opinion of some of the popular types of exercising—running, jogging, weightlifting?

"Any exercise is better than no exercise. We believe in internal stretch exercises like T'ai Chi, combined with rhythm breathing. When you lift weights or work against a machine you put all your pressure outside. With internal exercise you strengthen inside muscles, tendons, as well as experience relaxation.

"In addition, people running and jogging need an understanding of what they do. They put all the strain on their heels and toes—and running a long distance is bad for a woman's uterus and bladder and faces get more wrinkled. All the blood goes down to the feet. I recommend people who do long jogging or running learn how to do headstands and reverse the flow back to their heads." ■

to determine their particular physical conglomeration. Once we know what the requirements are, through physical observation and laboratory analysis, we can prescribe a lifetime diet with vitamin supplements," says Zimmerman. To arrest aging, these two men recommend good old reliable vitamin C, as well as other antioxidants: vitamins A and E, selenium and zinc paba. Selenium, according to Dickens, rebuilds cell walls. Whether it's all hype or help remains in question.

Then there are Chinese herbs. Eleanor Chientan, who took over the Chientan herb company after her husband died, has a small retail store on Olympic Boulevard near Alvarado Street. On the walls of the store are pictures of Eleanor's late husband, Gold Chientan, with Ronald Reagan and Sam Hayakawa—two men who are testaments to *some* kind of longevity.

The main ingredient in many of the compounds that Chientan sells is *pure* Chinese ginseng, reputed to be good for insomnia, poor memory, impotence and general weakness—all frequent symptoms of aging. These compounds are supposedly good for everything from preventing a hernia to promoting weight loss. Chientan, however, is careful to caution, "I want you to understand fully that I am not practicing medicine here."

ALCOHOL

So long the butt of medical derision doled out over cocktails, booze may be coming back into its own as an antiaging drug. Says UCLA's Dr. Lissy Jarvik, head of the Department of Aging, "The data show that alcohol is good for you within reason. Studies have indicated that nontetotalers

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