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Exercise and Rest: Getting the Balance Right

Exercise in the open and rest would be better than all medicinal properties.

Edgar Cayce reading 4654-1

EVERYWHERE IN NATURE, we can observe a continuous interplay of motion and stillness, activity and inactivity, outward expression and inward receptivity—the yin and yang of Eastern philosophy. Our physical bodies, too, need alternate periods of movement and rest to stay healthy and balanced. Because our modern and often sedentary lifestyles require too little physical activity of us in terms of our everyday living, we need to make an intentional effort to increase that activity through exercise.

We have seen in the previous chapter how the manipulation of body tissues through various forms of massage can help, from the outside in, to remove energy blocks and metabolic waste and stimulate the circulation of blood and lymph. Exercise is a means of achieving similar results through activity from the inside out. Some of the best methods of physical therapy combine manipulation with movement therapy, or passive exercise with active exercise.

Edgar Cayce often stressed the importance of physical exercise, saying in one reading that *"The body should exercise sufficiently to at times be physically tired."* (5718-1) Evidently, the tendency of humans to overexercise the mind but underexercise the body was as prevalent in Cayce's days as it is today.

In recent years, however, scientific research has shown that the mind, in turn, benefits from physical exercise. A preliminary study conducted in 2001 at the University of Illinois in Urbana-Champaign demonstrated that thirty minutes of moderately heavy to heavy running on a treadmill could improve the thinking ability of a group of young men and women. Following the exercise, the speed of the decision-making process was increased in the test subjects, and the answers that respondents provided to test questions also proved more accurate. Also in 2001, researchers at Nihon Fukushi University in Handa, Japan, found that individuals consistently scored higher on intellectual tests after embarking on a running program. The reason this happens is likely improved blood flow in brain tissue and an increase in oxygen intake, both of which translate into improved circulation.

It is interesting to note that when the joggers stopped their training, the improvements diminished, suggesting that ongoing exercise is required to maintain the benefits. The Cayce readings also emphasize that consistency is key to success in any exercise program. Reading 308-13 says: *"... regular exercise would be helpful, but don't start this and then do it for a day and then skip two or three days and then try it again; either do it regularly or don't begin..."*

Regular exercise has been shown to boost older people's mood, but indeed, to reap the benefits of an exercise program one must commit to keeping it up. This was demonstrated in a study reported in the March 15, 2001, issue of the *American Journal of Epidemiology* which showed that older adults who exercised regularly for a while but later stopped were more likely to develop depression than those who had kept up their physical activity.

The influence of physical activity on overall health is so great that a new set of dietary guidelines issued by the U.S. federal government in May 2000 includes a recommendation for exercise. Exercise is known to improve cardiovascular health. It can thus help to prevent heart dis-

ease, America's number-one killer disease. A study conducted at the University of Pisa in Italy showed that exercise keeps the lining of the arteries young, and this may be one of the reasons for the heart-protective effects of exercise. However, regular exercise may also significantly reduce the risk of cancer. Researchers from the Cooper Institute in Dallas, Texas, found that men who were considered to be "unfit" based on treadmill tests were 80 percent more likely to die of cancer than fit men were. In another study done at the University College Medical School in London, U.K., men who vigorously exercised two or more times per week had a 24 percent reduction in cancer risk.

From a holistic perspective, exercise can help to prevent illness by improving circulation of blood and lymph, which promotes cellular detoxification and nourishment. Exercise also gets us sweating, and this may in itself provide a health boost by helping to fight infections, according to a report published in the December 2001 issue of journal *Nature Immunology*. *Dermicidin*, an antimicrobial agent manufactured in the body's sweat glands, secreted into the sweat, and transported to the surface of the skin, is responsible for this action. *Dermicidin* was found to be effective against many different types of bacteria, including *E. coli*, *S. aureus*, and *Candida albicans*. Sweating can also help to remove toxins from the body. The Cayce readings recommend sweating, most often in the form of sweat baths, but also the type of sweating that results from exercise, as suggested in reading 567-5: "*Keep the physical exercises; not strenuous, but consistent, so that the body—whether in walking, in the setting-up exercise, no matter how cold it may be outside—gets up a good sweat; and we will have a better coordination throughout the system.*"

This reading also points out that when it comes to exercising, consistency is more important than excessive strain. This is, in fact, what modern health experts are telling consumers. A study reported in the March 29, 2001, issue of the journal *Nature* shows that those who engaged in regular moderate exercise such as walking, biking, or gardening, demonstrated the highest overall physical activity levels compared with those who undertook shorter bouts of intense activity. According to the researchers, such regular moderate exercise may also burn more calories.

Walk for Your Life

Cayce's advice that "*Walking is the best exercise!*" (715-1), repeated in quite a few readings, appears once again to be substantiated by modern research. A study done at Harvard Medical School in Boston, Massachusetts, found that walking decreases women's risk of heart disease. The length of time spent walking each day was a more important determinant of cardiovascular health than walking speed. Among the test subjects, who were all women aged forty-five and older, those who regularly walked an hour or more each day had about half the heart disease risk of those who walked less than an hour. This study was made public in the spring of 2000. In 1943, Cayce had told a thirty-two-year-old woman: "*Walking is the best exercise, but don't take this spasmodically. Have a regular time and do it, rain or shine!*" (1968-9)

Another study, published in the June 14, 2000, issue of *The Journal of the American Medical Association*, showed that regular, moderate exercise such as walking can cut women's risk of stroke. This was true even if the women started walking at an older age, which proves that it is never too late for a change to a healthier lifestyle. Walking has also been shown to lower blood pressure, a condition most prevalent among men and postmenopausal women. The blood-pressure-lowering effect of walking was acknowledged by Cayce more than half a century ago. In reading 2533-6, Cayce told a patient suffering from hypertension: "*Walk in the open early of mornings. This brings better activity of oxygen and ozone as to keep the balance in the blood flow through lungs, heart, liver, kidneys. These are the sources from which either the pressure or repression causes disturbance.*"

Walking is a weight-bearing exercise, in which strain or weight is applied to the bone. Weight-bearing exercise is the most effective method for strengthening bone mass and thus for preventing osteoporosis. Indeed, osteoporosis need not be an unavoidable side effect of menopause and aging. Bone is living tissue that continuously renews and regenerates itself throughout the entire lifespan. Old bone cells break down, and new ones are being built. Mineral salts, including calcium, phosphorus, and magnesium, are continuously being deposited into bone tissue, allowing it to remain hard and unbending. Although the body's bone-building activity slows down somewhat as we get older,

it can be increased at any age and maintained at optimal levels through a physically active lifestyle.

Exercise is the only way to stimulate bone-building cells into action. It's also important to provide the body with high-quality raw materials through good nutrition, but it's only through weight-bearing exercise that bone actually gets built. Research has shown that people who are bedridden and unable to stand up lose bone mass very quickly. Bone loss has also been observed in astronauts who returned to earth after spending several days or weeks in space where there was no gravitational pull. Assisted resistance exercises, such as applying pressure to the soles of the feet or the palms of the hands, are a must for anyone who is confined to bed for a considerable length of time. It is only by keeping the pressure on our bones that we can make them strong and resilient. For those who are able to do so, walking is one of the best ways of achieving this.

The Benefits of Exercising Outdoors

Walking also gets us outdoors, into the sunshine and the fresh air, and with today's indoor lifestyles, we often get far too little of both. Cayce suggested that we should "*Supply to the body more action through the general forces of supply to the system outside, close to nature.*" (4266-1). Another reading says: "*But long walks morning and evening are well, as to the exercise; and when doing same breathe deep into the lungs.*" (272-8) Deeper breathing allows more oxygen to reach deeply into the lungs, replacing stale air that has accumulated during periods of shallow breathing. Because of poor breathing habits, most people use less than a third of their total lung capacity. This means that better breathing could more than double the amount of oxygen that reaches the lungs, the blood, and ultimately the cells of the body. Increased oxygen means increased circulation and better detoxification and nourishment of all body cells.

Outdoor exercise is an excellent way to improve breathing. When the body moves, it demands more oxygen. Breathing should never be forced or choppy, but always gentle and easy, smoothly flowing. Deeper and slower breathing is also the perfect antidote to stress. The fight-and-flight response—the position most of us unconsciously adopt in

response to a perceived stressor—causes muscles to contract and restricts breathing, making it quick and shallow. By consciously altering the breathing pattern with deeper and slower breaths, it is possible to relax the entire nervous system in a relatively short time. The deeper the breath you take, the less often you will need to breathe. The average person breathes about sixteen times a minute. Those who are skilled in proper breathing, as are practitioners of Chi Kung, for instance, breathe only five or six times a minute. The slower and deeper the breathing, the calmer the person is. He or she is also far less likely to become breathless or fatigued.

You will notice that your posture plays a significant role in your ability to breathe well. When you're slouched in a chair or sofa, the rib cage compresses the lungs, making it difficult to fill them with air. The more erect you sit or stand, the better your breathing capacity. Deep breathing, in turn, will strengthen muscles and help them work more efficiently, thus improving posture. Even the internal organs receive a workout through proper breathing: the contracting and expanding diaphragm massages the kidneys, liver, stomach, and heart. When the lungs are expanded on the in-breath, even the intestines and sex organs receive a gentle massage.

Breathing is the most vital of body functions. An improvement in breathing patterns and breathing capacity brings about an immediate improvement in all other body functions. Breathing is the very foundation of life, and it enhances the body's ability to regenerate itself. Reading 2072-5 says, *"Breath is the life blood cleansing of the body . . . For, there are the needs for the combination of the gases as inhaled to act upon the purifying of the system."*

Exercising outdoors also helps us to spend time in natural sunlight. Reading 1739-2 suggests: *"Most of the exercise should be outdoors, but not night. Day—sunlight—"* The "sunshine nutrient," vitamin D, is an essential nutrient for the absorption of calcium and other minerals from the diet. Vitamin D produced in the skin with the interaction of sunlight is functionally superior to synthetic vitamin D, such as that added to milk and other fortified foods. Research has shown that residents of northern latitudes frequently suffer from vitamin D deficiency, especially in the winter. The elderly are at particularly high risk.

An excellent activity to pursue outdoors is gardening. A study conducted at the University of Arkansas in Fayetteville, U.S., showed that yard work could help to prevent bone-thinning in older women. The researchers found that women who worked in the garden at least once a week had stronger bones than those who were more sedentary.

Outdoor exercise is also important for children and adolescents. Most of the body's bone-building activity takes place in the first twenty years of life. Children's natural urge to run, jump, and play outdoors should therefore be encouraged as much as possible. A study conducted at the University of Taira in the Canary Islands, Spain, in 2001 identified soccer as an excellent sport for strengthening young men's bones. Researchers found that the long-term participation in soccer helps to boost bone density, thus reducing the risk of fractures and osteoporosis over the long term. Young men who had begun playing soccer before they reached puberty had heavier bones in their legs and spine than those who had been less physically active.

Research studies such as these confirm the energizing, rejuvenating effects of outdoor exercise, as given by Cayce: ". . . it is the best way to keep yourself young—to stay close to nature, close to those activities in every form of exercise that breathes in the deep ozone and the beauty of nature. For you may breathe it into thine own soul . . ." (3374-1)

The Head-and-Neck Exercises

Next to walking, the Cayce readings suggest the "head-and-neck" exercises as being of primary importance in maintaining good health. This is a set of gentle bending and rolling exercises of the neck, which help to relieve muscle tension and increase circulation to the head, brain, ears, and eyes. With improved circulation, greater mental clarity, visual acuity, and better hearing ability are often achieved. Cayce reading 3549-1 describes the head-and-neck exercises:

Sitting erect, bend the head forward three times, to the back three times, to the right side three times, to the left side three times, and then circle the head each way three times. Don't hurry through with it but take the time to do it.

This reading also instructs that it is important to keep these exercises on a regular basis if results are to be achieved:

Take this regularly, not taking it sometimes and leaving off sometimes, but each morning and each evening take this exercise regularly for six months and we will see a great deal of difference . . . You will get results.

According to reading 379-16, the benefits of the head-and-neck exercises extend beyond the area of the head and neck to the entire body: “. . . the head and neck exercises . . . will aid in producing the better balance in the body, or equilibrium, as well as in the circulation to the head and to the heart.” The head-and-neck exercises were sometimes suggested as an aid to become attuned to divine influences in preparation for meditation, or as an aid in relaxing the body before going to sleep at night.

Tinnitus, or a constant sensation of ringing in the ears, is a common complaint of the elderly. The head-and-neck exercises, when done on a regular basis, have proven effective in the relief of this annoying condition. Dr. William A. McGarey has found that these exercises are also helpful in the treatment of arthritis. In *Heal Arthritis: Physically-Mentally-Spiritually*, he writes: “A head-and-neck exercise can be used to bring about greater flexibility in the cervical spine. If used regularly over a long period of time, it will correct the rigidity which sometimes comes about in certain types of arthritis. The hearing and visual acuity of the eyes are both sharpened by using this exercise.”

Circling the head three times in both directions is one of the fundamental movements of Tai Chi, an ancient Chinese method of exercising that combines slow, gentle movement with meditation. A number of current studies have identified Tai Chi as an ideal type of exercise that can help older people stay active. Several studies have also found Tai Chi to be effective in relieving arthritis pain. Research published in the September 2001 issue of the *Archives of Physical Medicine and Rehabilitation* showed that Tai Chi Chuan, a special type of Tai Chi, can help to improve circulation.

Better circulation achieved through the head-and-neck exercises helps to properly nourish body cells and keep them young, as Dr. Harold

J. Reilly observes in *The Edgar Cayce Handbook for Health Through Drugless Therapy*, written with Ruth Hagy Brod: “The head-and-neck exercises . . . if performed faithfully each day, will stimulate the circulation to the entire face, head, and neck; keep the throat and jaw line firm; and prevent the formation of double or multiple chins.”

The head-and-neck exercises, requiring only a few minutes time in the morning and evening, are easily incorporated into a daily routine. The benefits are immense, and the time spent is easily recuperated through the greater physical mobility and mental clarity that help to improve productivity when working on various tasks throughout the day.

Health Stretches

Have you ever watched a baby stretch and yawn? There is an amazing fluidity and suppleness to the stretching movements of very young children, who tend to stretch with utter abandon. They're in no hurry when stretching; they surrender totally to the movements which their bodies naturally and gracefully perform. We should all stretch and yawn before getting out of bed in the morning; if we did, we might be in a better mood when we do get up, and our day may go more smoothly as a result.

Stretching the body and limbs is one of the best ways to stay flexible and keep the muscles tuned. The Cayce readings suggest, “Stretch the body as a cat would stretch. This is the best exercise to keep [the] body in proportion.” (5271-1) and “The stretching of the body; not in excess, but as a stretching of the arms, of the limbs—side, circular, forward, up, down. Not just as a setting-up exercise, but stretch the arms high above head—stretch the arms to the front—a swinging motion. Two to three minutes of this each day will make for wonders in the feelings and the activities of the body.” (684-1)

The ancient Indian health system of yoga teaches the importance of stretching the body in the various yoga postures, and in Oriental medicine, stretches of the meridian energy lines are regularly performed as part of a treatment or exercise regimen. In fact, several of the yoga postures prescribe stretches that resemble those recommended in the Cayce readings. Yogis keep their bodies amazingly flexible and youthful through yogic routines.

The exercises that Cayce recommended were often specified to be most beneficial for mornings or evenings. In general, morning exercises were designed to be expansive, with an emphasis on stretching the body upwards and exercising mainly the upper body. *"Mornings—with plenty of air in the room, standing, stretch the body to the full height. Rise on toes and at the same time gently raise the arms, so that there is the exercise of the muscular forces as well as the raising of the structural portion of the body."* (259–10)

The evening exercises were more contractive, with an emphasis on exercising the lower limbs. *"When ready to retire, let the exercise preferably be for the lower limbs; this [is] a movement as of sitting on the floor and walking across or swinging the limbs one in front of the other for three to four movements."* (2454–2)

The morning exercises help to draw the energy upwards in the body in preparation for the day's activities, while the evening exercises help to draw energy and blood flow downwards, away from the head, in preparation for the night's rest and sleep. Reading 288–11 explains: *"... the evening exercises for the blood flow away from the head, and of mornings with the upper portion of body. Swinging, circular motion then of lower portion of body in evenings, and the circular motion of hands and upper portion of body of mornings..."*

Cayce frequently emphasized the importance of coordinating the breath with the exercise movements. The following reading includes alternative nostril breathing, a technique employed in the yogic tradition to increase pranic (spiritual) energy, and thus health, in the body:

Of morning, and upon arising especially (and don't sleep too late!) - and before dressing, so that the clothing is loose or the fewer the better—standing erect before an open window, breathe deeply; gradually raising hands above the head, and then with the circular motion of the body from the hips bend forward; breathing in (and through the nostrils) as the body rises on the toes—breathing very deep; exhaling suddenly through the mouth; not through the nasal passages. Take these for five to six minutes. Then as these progress, gradually close one of the nostrils (even if it's necessary to use the hand—but if it is closed with the left hand, raise the right hand; and when closing the right nostril with the right hand, then raise the left hand) as the breathing in is accomplished. Rise, and the circular

motion of the body from the hips, and bending forward; expelling as the body reaches the lowest level in the bending towards the floor (expelling through the mouth, suddenly). See? 1523-2

Today's consumer looking for an exercise program is offered an unprecedented selection of techniques, ancient and modern. There are many different types of yoga, for instance, each emphasizing a different aspect of this ancient Indian health discipline, and each catering to a different personality. Some people like to do vigorous exercises, while others prefer slower, gentler techniques. As we have seen, probably the most important aspect of embarking on an exercise program is that one is able to carry it through and continue doing it persistently. Whether it's walking in the neighborhood park, swimming, cross-country skiing, or dancing, the main thing is to find an activity, or a combination, that you enjoy so that you'll do it because you like it and not because you believe you must.

Putting Stress to Rest with Sleep

During the last part of the twentieth century, stress became a household word. With economic abundance and the multiple choices that result from it, we began having a constant flurry of activities in our lives. To keep ourselves marketable in a competitive work world, we must continuously keep up-to-date on new developments in our field of expertise. Sophisticated technological devices have made communication easier but have also made it easy for us to invade each other's privacy. Private time and family time is frequently interrupted by telephone calls from canvassers and marketing research firms, and our mailboxes are overflowing with unsolicited offers to apply for yet another credit card. Cell phone technology makes sure that we are accessible anywhere, anytime, around the clock. It's almost impossible to book time off. The Internet and e-mail keep us glued to the computer for hours on end, opening up a vast world of information that is wonderfully exciting, but that can also be extremely stressful.

With all this and more going on in our lives, is it any wonder that we feel overwhelmed and unable to cope? When we feel this way, our

physical and mental energy starts to crumble and everything around us seems to go wrong. At this point, nothing we can “do” will fix things. The only solution is to get sufficient rest and relaxation. Edgar Cayce put it in very simple terms: “*Unless the body would take time to take care of self, physically and mentally, how would one expect to have the correct results from one’s activities?*” (349–4) and “*Do not fail to play as well as work. Do not fail to relax mentally and physically.*” (257–50)

Research has shown that prolonged mental or physical stress can cause a number of physiological changes, including lowered immune response, high blood pressure, and high cholesterol levels. Stress has also been shown to impair memory by affecting the electrical activity in the hippocampus, the part of the brain that holds on to information. A type of stress, sleep deprivation, also interferes with the forming of new memories and the learning of new skills. Sleep seems to help the brain mold newly acquired information into lasting memories. But the hormones that stress produces in the body seem of themselves to prevent us from getting sufficient sleep, according to a study published in the April 2001 issue of the *Journal of Clinical Endocrinology and Metabolism*. The stimulating effects of corticotrophin-releasing hormone (CRH) were shown to interfere with sleep in middle-aged men worrying about family, work, or finances, perpetuating a seemingly endless cycle of stress, sleep disruptions, and more stress.

If we’re caught in such a stress cycle, getting proper sleep is indeed the best remedy. Most people would agree that there is nothing more effective than a good night’s sleep to restore body and soul. The trouble for many is that sound, uninterrupted sleep remains an elusive dream. At least one third of the general population suffer from some type of sleep disorder. Even those who don’t are often shortchanged when it comes to sleep: With tightly scheduled activities crowding into natural downtime, many individuals sacrifice sleep in order to maximize productivity.

Yet nothing could be more counterproductive. A flood of new research now confirms what our tired bodies and minds have been trying to tell us all along: Sleep is vitally important to our physical, mental, and emotional health. By disregarding our need for sleep, we not only increase our chances of compromising the ability to concentrate, react,

and function effectively—we also risk shortening our lives: Those who regularly sleep less than six hours a night don't live as long as those who average seven or eight hours. The sleep-deprived are also more accident-prone and likely to suffer from stress-related illness, including headaches and depression.

The exact nature of sleep is still poorly understood by science, but the benefits of sleep, and the dangers of sleep deprivation, are increasingly coming to light. We know today that sleep is necessary for proper immune function and to help regulate the endocrine system. Sleep-associated processes stimulate the release of important hormones and influence lymphocyte activity. In effect, sleep is a fundamental form of self-regulation for the body.

The phenomenon of sleep has long fascinated philosophers, poets, and mystics. Heine called sleep “the most exquisite of all inventions,” and in Shakespeare's *Macbeth*, sleep is the “balm of hurt minds, great nature's second course, chief nourisher in life's feast.” Edgar Cayce referred to sleep as a sixth sense which “acts from the nervous system.” (849–20) He explained that there is an “active force within each individual that functions in the manner of a sense when the body-physical is in sleep . . . ” (5754–2) As such, sleep directly influences and helps to revitalize and balance the other senses. The central nervous system and its major organ, the brain, are indeed the focus of sleep research, which gained momentum only in the last two decades of the twentieth century.

Sleep Cycles. By measuring electrical activity in the brain, and by observing eye and body movements, researchers have identified cycles of increased and reduced activity in the brain and body during sleep. One of the most intensely researched stages of sleep is known as REM sleep, which first occurs about an hour or so after we drift off to sleep. REM stands for Rapid Eye Movements, which occur during this phase. Brain activity is high, and the eyes can be seen to move rapidly underneath closed eyelids, while the large muscles in the body are relaxed. This is a deep-sleep phase, during which the sleeper is hard to awaken. Some 80 percent of dreams occur during REM sleep.

REM phases alternate with non-REM (NREM) sleep, when brain ac-

tivity registers slower wave patterns, which are divided into four distinct phases. The body is most active during the low-frequency delta phase, when sleepers sometimes toss and turn. Those who sleepwalk do so while in delta sleep.

During a typical night, the sleeping individual moves through several cycles of REM sleep, each one of longer duration than the preceding one. The amount of REM sleep is correlated with the amount of mental and emotional stress experienced during the day. When REM sleep is repeatedly interrupted in test subjects, they report feeling nervous and unsure of themselves, which clearly signals that REM sleep, and the dreams that occur during it, are an essential stress-reduction mechanism for the body/mind unit.

Research conducted at the Sleep Research Laboratory at Loughborough University, U.K., has shown that the area of the brain most clearly connected with sleep is the frontal area of the cerebral cortex, which is also responsible for speech, short-term memory, and flexible thinking. As we have noted earlier, short-term memory is one of the main functions to be affected by stress and lack of sleep. As well, a form of schizophrenia is associated with the same part of the brain, and symptoms of sleep-deprivation and schizophrenia are often strikingly similar. The restorative influence of sleep is clearly needed to prevent brain-fog and mental imbalances.

The Chemistry of Sleep. Folk wisdom holds that babies and children grow during sleep, and modern sleep research has uncovered factors that scientifically substantiate this concept. Researchers at the University of Tennessee have found that a chemical called *growth hormone-releasing hormone* (GHRH) is involved in regulating sleep. Administering the hormone to individuals causes them to sleep longer than they normally would, whereas depriving them of GHRH causes them to sleep less. GHRH stimulates the release of growth hormone, which promotes growth and other metabolic functions, notably protein synthesis. Even after adolescence and throughout adult life, growth hormone continues to be released but in reduced quantities.

Certain neurotransmitters also play an important role in the regulation of sleep. The best known of these is serotonin, which is essential for

promoting relaxation and sleep. Neurotransmitters are chemicals used by neurons to signal and stimulate one another. The spaces between nerve cells which facilitate the transmission of signals are called synapses. Researchers believe that one of the reasons why we need to sleep is that sleep exercises these synapses, which lie almost dormant during wakefulness.

Another chemical, the hormone melatonin, which is produced by the pineal gland, has received considerable attention for its role in promoting sleep. Melatonin secretion is regulated by the natural cycle of light and darkness. The use of indoor lights and insufficient exposure to natural sunlight during the day suppress melatonin secretion, resulting in varying degrees of sleep disruption. Our modern lifestyles with their many interferences of the natural sleep/wake cycle appear to be major culprits in preventing us from getting a good night's sleep.

The Circadian Rhythm. Derived from the Latin "circa diem" (about a day), the circadian rhythm is a twenty-four-hour cycle of physiological and behavioral patterns governed by the body's internal clock, a tiny clump of cells in the hypothalamus known as the suprachiasmatic nucleus (SCN). The SCN is synchronized to light/dark cycles in the environment and other daily cues. In a natural environment, we would sleep when it is dark and be awake and active during the daylight hours. We would sleep longer hours in the winter and much less during the summer months, when nights are shorter. But in order to function as a society, we have imposed artificial, inflexible schedules on ourselves, with the result that our internal clocks are thrown out of sync and can no longer support our natural rhythm.

Window-less office environments with fluorescent lighting fixtures are particularly damaging, but even ordinary household lighting can interfere with the brain's internal clock. A study done at Brigham and Women's Hospital in Boston throws light on why many of us find it so hard to get up in the morning. According to the researchers, exposing people to indoor lighting after sunset shifts the normal time of their peak drive for sleep from about midnight to about 4 or 5 a.m., with the result that they are required to get up much closer to the time when their bodies are making peak demands for sleep.

Folk wisdom and traditional health care methods, notably Ayurveda and Oriental medicine, have long maintained that sleep begun at least an hour before midnight is more refreshing and rejuvenating than sleep extended late into the morning. Modern sleep research is now substantiating this claim. The Cayce readings, too, suggest, "... *don't sleep too late!*" (1523-2) and "*Well that the body rest with the shadows. Early to bed, early to rise.*" (4569-1)

The Mystery of Sleep. No sleep study has yet come up with a satisfactory answer to one of life's most fascinating questions: What happens to consciousness during sleep? Does it simply shut down, leaving only a reserve function to produce and process dreams as a figment of the imagination; or does it travel out of the body, eventually returning with memories of its adventures which we then remember as dreams?

Philosophers and mystics have often described sleep as the shadow of death, a reflection of the state when the connection of body and soul is permanently severed. This is illustrated in a quote from *In the Light of Truth: The Grail Message* by Abd-ru-shin: "Even when the gross material body is asleep, its firm union with the soul is loosened, because during sleep the body produces a different radiation, which does not bind so fast as that required for the firm union. But since the union still exists, only a loosening takes place, no separation. This loosening is immediately ended at each awakening." Elaborating on this phenomenon, Dr. Richard Steinpach says in *Why We Live After Death*: "Before achieving deep sleep, some persons have the sensation that they are falling, and they physically twitch. It is the moment when the soul rises out of the previously firm radiation-connection [with the body]." Dr. Steinpach contends that the rapid eye movements observed during deep REM sleep indicate that "the spirit is experiencing a world of higher animation that the sluggish earthly eye is hardly able to follow . . . What we describe as dreams are the experiences of spirit in the world beyond."

Edgar Cayce describes sleep as "that period when the soul takes stock of that it has acted upon during [the time between] one rest period to another . . ." He says that sleep, as the sixth sense, is the activating force of another, higher "self" which is a "faculty of the soul-body itself . . .

When the physical consciousness is at rest, the other self communes with the *soul* of the body . . . " (5754–2) Cayce contends that our thoughts, emotions, attitudes, and actions in the waking state determine our experiences in sleep, when we check in with our higher selves as to whether our activities have been in line with the ideals that we hold at the soul level.

According to Cayce, the moments after an individual first falls asleep are an ideal time for suggestive therapy, particularly in children. During this time, the individual is said to be especially responsive to suggestions being made to the subconscious. Conditions which have been successfully treated with presleep suggestion are wide ranging and include bedwetting, thumb-sucking, and imbalances of the nervous system, such as insomnia itself. In her book *The Miracle of Suggestion*, Cynthia Pike Ouellette recounts how she used presleep suggestion therapy to help her daughter, who was born with multiple disabilities and was not expected to live, yet beat the odds and developed normally despite medical predictions to the contrary.

Getting Better Sleep. Paradoxically, the quality of our sleep affects our health, but the state of our health also determines how well we sleep. Illness can cause insomnia, and sleep deprivation can cause illness. Not surprisingly, conditions involving severe discomfort, such as osteoarthritis, are frequently associated with insomnia. Indigestion and other digestive problems, notably peptic ulcers, are known to cause insomnia. Hormonal imbalances also account for many hours of lost sleep and may be the main reason why women are 50 percent more likely to suffer from insomnia than men. A 1998 study by the U.S. National Sleep Foundation confirmed that the hormonal changes associated with menstruation, pregnancy, and menopause produce sleep disruptions in the majority of women.

Since digestive system disturbances, particularly liver congestion, have a strong influence on the synthesis and break-down of hormones, it is important to improve digestive function when addressing sleep disorders. Eating the last meal of the day no later than three hours before going to bed helps to prevent digestive discomforts during the night. Avoid fried, greasy foods, and combinations of large amounts of

protein and starch at the same meal. These are difficult to digest and likely to cause bloating and gas. It also helps to reduce the consumption of caffeinated beverages—coffee, black tea, and colas; avoid these completely in the late afternoon and evening.

Also high on the list of sleep-promoting activities is physical exercise. Research has shown that those who exercise several times a week fall asleep faster and stay asleep longer than nonexercisers.

Herbal Sleep Aids. A number of herbal remedies are highly effective in promoting sleep naturally. These are safer than pharmaceutical sleeping pills, which not only create a drug dependency, but also have the counterproductive effect of depressing important REM sleep, thus producing symptoms of REM deprivation, such as confusion and irritability. Herbal relaxants are not habit-forming and have no negative effects on daytime behavior.

One of the most popular herbs for relieving insomnia and anxiety is *valerian root*, whose use dates back to ancient Greece. Throughout Europe, valerian preparations are well-known as a nonaddictive alternative to pharmaceutical sleeping pills. Several research studies have confirmed the ability of valerian root to gently sedate the central nervous system through its action on a group of brain cells known as GABA receptors.

Another favorite herbal sleep aid is lavender, whose essential oil has a relaxing effect on the nervous system through its action, via the olfactory bulb, on the brain's limbic system and the hypothalamus gland. Aromatherapists value lavender for its mood-balancing, antidepressant, and sedative qualities. A 1995 study involving elderly nursing home residents, conducted by the University of Leicester, U.K., concluded that the aroma of lavender worked as well as sleeping pills in helping insomniacs to fall asleep and stay asleep. Test subjects who had been taking pharmaceuticals prior to the study were able to discontinue these when they began using the lavender therapy. Lavender oil placed in an aromatic diffuser or oil burner in the bedroom allows the fragrant molecules to be released into the air. Alternatively, a few drops of the oil can be sprinkled on a pillow or handkerchief placed close to the face.

Other helpful herbs include camomile, linden flower, catnip, and

skullcap. Tinctures or teas of these herbs can be taken alone or in combination. A number of effective herbal tea preparations specifically aimed at promoting better sleep are available in natural food stores.

An old folk remedy for insomnia also suggested by Cayce, a glass of hot milk sweetened with unpasteurized honey and taken at bedtime, can be helpful. The easily digested simple sugars in honey promote the conversion of the amino acid tryptophan (found in milk) to the important sleep chemical serotonin.

A bedtime snack of calcium-rich foods, such as almonds, dates, figs, or sesame seeds, also helps to produce a relaxed state in the body. A well-balanced calcium/magnesium supplement is equally effective.

A sleep-friendly environment is also important. Darkness promotes the production of the sleep chemical melatonin. Keeping light out of the bedroom as much as possible is therefore important. The room should be well ventilated and cool, but not cold. Low-frequency fields generated by electrical appliances can interfere with sleep, and it is best to unplug such devices if they are located close to the bed. Some individuals report that their sleeping patterns have improved with the use of a magnetic sleeping pad, which realigns and supports the body's natural magnetic field.

As important as sleep is, more is not necessarily better. Although there are individual variations in the need for sleep, most people function adequately on seven to eight hours a night. This agrees with Cayce's assessment that *"Seven and a half to eight hours should be for most bodies."* (816-1) Researchers at the Department for Sleep Medicine at the University Clinic in Bochum, Germany, say that sleeping excessively can be as damaging as not getting enough sleep. Dr. Michael Bonnet and Dr. Donna Arand of the Kettering Medical Center in Dayton, Ohio, concur. In their opinion, getting more sleep is like gorging on food or drinking to excess. But with today's busy lifestyles and hectic schedules, chances are most of us need not lose valuable sleep worrying about overindulging in this wonderful elixir.