



BISON BASKETBALL CAMP

DAVID LIPSCOMB UNIVERSITY

Nashville, Tennessee

SLEEP

Are you a "sleep cheat?" Are you gradually adding to a sleep deficit night after night? If so, you are in for serious physical and psychological consequences, warns Dr. Julius Segal of the National Institute of Mental Health. Sleep is only one of the essential needs of man. "We sacrifice it," says Segal, "at considerable peril to our bodies and minds."

There are two types of sleep. The first is called "REM" (rapid eye movement) and consists of relatively short periods in which dreams occur. The second is the orthodox or non-dreaming sleep. This is called "S" (slow-wave) sleep because of changes in the brain wave detectable on the electro-encephalogram.

These two types of sleep apparently have different functions. S-type is necessary for biological health and performance. During this type of sleep, the body pours out growth hormone which in adults has the function of promoting renewal of our tissues. REM sleep, on the other hand, seems to be mainly concerned with psychological function. Without it, we soon get into serious emotional and intellectual difficulties.

Science is also confirming the wisdom of the coach's curfew. When an athlete becomes a "sleep cheat," he is upsetting a very delicate balance between applied stress and the body's recuperative powers. Further, in limiting the hormonal repose he may be limiting his own potential in his sport.

Missing curfew has definite consequences on both types of sleep, but particularly on slow-wave sleep. This is of primary interest to the athlete. S-type sleep increases with exercise and no doubt contributes to physical conditioning. With it comes an increase in protein synthesis which translates into speed, strength and endurance.

Just what is the optimal sleep length for each individual is unknown. In the early 1500s, Andrew Boode's Dietary of Health suggested eight hours in summer and nine hours in winter as the ideal time to sleep. We have not progressed much beyond this suggestion. Surveys suggest that 7 1/2 hours is the average sleep taken by most people--The voice of the body is unheard. Which is why the lack of adequate sleep is the primary problem in the training of athletes.

Nature, you see, makes no allowances for such mistakes. Her penalties for violating the curfew are a lot more substantial than any coach's. And nature's bedchecks occur every night.

My first coach was partial to naps. I took naps to make up for lost sleep, took naps to conquer fatigue and prevent exhaustion, took naps to make me strong and increase endurance. I even took naps to improve my disposition. When things were going wrong and there was any doubt about what to do, I took a nap. And whatever reason, the nap theory worked. It produced what it promised.

The nap is a biological and psychological and spiritual necessity. It renews and restores and revives. But only in childhood do we accept it. Only in childhood do we use again and again that first 90 minutes of sleep which scientists tell us is the deepest and most refreshing of all.

Yet the nap is the only answer for the overtrained athlete who finds himself more and more fatigued, whose performance is deteriorating, who lacks zest and is losing interest. This athlete is the one who needs more sleep at night, a nap during the day and a halt in his training.

The professional athletes have come to know this. Those athletes who are totally into the use of their bodies, who plan their day around maximum performance, know the importance of rest. I saw in the NEW YORK TIMES that basketball player Walt Frazier occasionally sleeps for 18 hours straight when the Knicks are on the road. A survey of touring women tennis pros showed that most of them slept 9 or 10 hours a night. I recall also that Tom O'Hara, when he was the leading indoor miler, would sleep for most of the 24 hours preceding a race.

The nap is also the answer to the self-imposed work-play week of the ordinary citizen. Few people are constructed of material strong enough to handle a program which includes a 40-hour work week, commuting, nighttime TV, and a weekend of exhausting physical and social activities. This life-style leads to what must be the major deficiency disease of our age—a deficiency in rest.

It is the child in me who accepts these demands, who refuses to acknowledge any physical restriction, who pushes on to exhaustion and depression, apathy and despair. But it is also the child in me who knows the answer.

When I become tired and irascible and even more difficult to live with than usual, when there is no zest in running and my races are getting worse and worse, I remember my first coach. And I look around for my baby blanket and a soft spot where I can lie down.

Condensed from Dr. Sheehan on Running, by George Sheehan, M.D.

health

Steps to '90s fitness

Dr. Aerobics sees boom in home gyms

Forget old-fashioned stationary bikes in the '90s. Instead, stair-climbing machines will be the new equipment in home gyms, says the doctor who launched the aerobic revolution.

Dr. Kenneth Cooper, with a new book on hypertension on shelves next week, predicts a new fitness consciousness that seems tailor-made for baby boomers reaching middle age. Ahead: increased use of home equipment and a friendlier approach to working out.

"The goal will be long life, not to run a marathon," says Cooper, who coined

the term aerobics in the '60s and is the director of the Aerobics Center in Dallas.

His new book, *Overcoming Hypertension* (\$18.95, Bantam Books), suggests a plan for preventing or reducing high blood pressure without drugs. Of course, part of his prescription is improved fitness in the form of aerobic exercise, such as walking or low-impact jogging.

Cooper predicts we'll:

■ Consume 75 percent of our daily calories before 1 p.m., and we won't pig out at night if we want to lose weight or keep it in control. Also: There will be less fascination with now-popular liquid diets.

■ Use more home-based treadmills, rowers and computerized bicycles, which offer resistance for both arms and legs.

■ Quit striving for the '80s fitness buzzwords "maximum heart rate" and seek "consistency," which is sticking to a regular, systematic exercise regimen.

"Consistency is the secret to success. You can't store exercise. We're rewriting the textbook."

■ Walk more, run less. Walking is easier on the muscles, and more people feel comfortable doing it — which ties right in with the new focus on consistency.

■ Try not to overdo it. "If you are running more than 15 miles a week, you are running for something beyond cardiovascular fitness. (See advice at right.) You can run a good thing into the ground. I didn't used to know that."

Cooper sees up to 50 percent of adults over 18 doing some sort of activity at least once a week. "I'm real positive about this decade."

The 58-year-old Cooper follows his

own prescription, and he's guided his family onto the track of fitness. He now runs 12 to 15 eight-minute miles a week, way down from the 50 to 60 miles he ran prior to 1969. He sometimes race-walks. His wife, Millie, jogs, and his college-age son and daughter run. One reality to his aging: His kids no longer run with him because "their warm-up is faster than my running."

By Gail McKnight

Rx for staying fit

Walkers: Do two miles in less than 30 minutes three times a week. Or walk two miles in less than 40 minutes, five times a week. The benefits are the same.

Runners: Don't do more than 15 miles a week if you seek fitness. If you are training, do more. But more means a greater risk of injury.