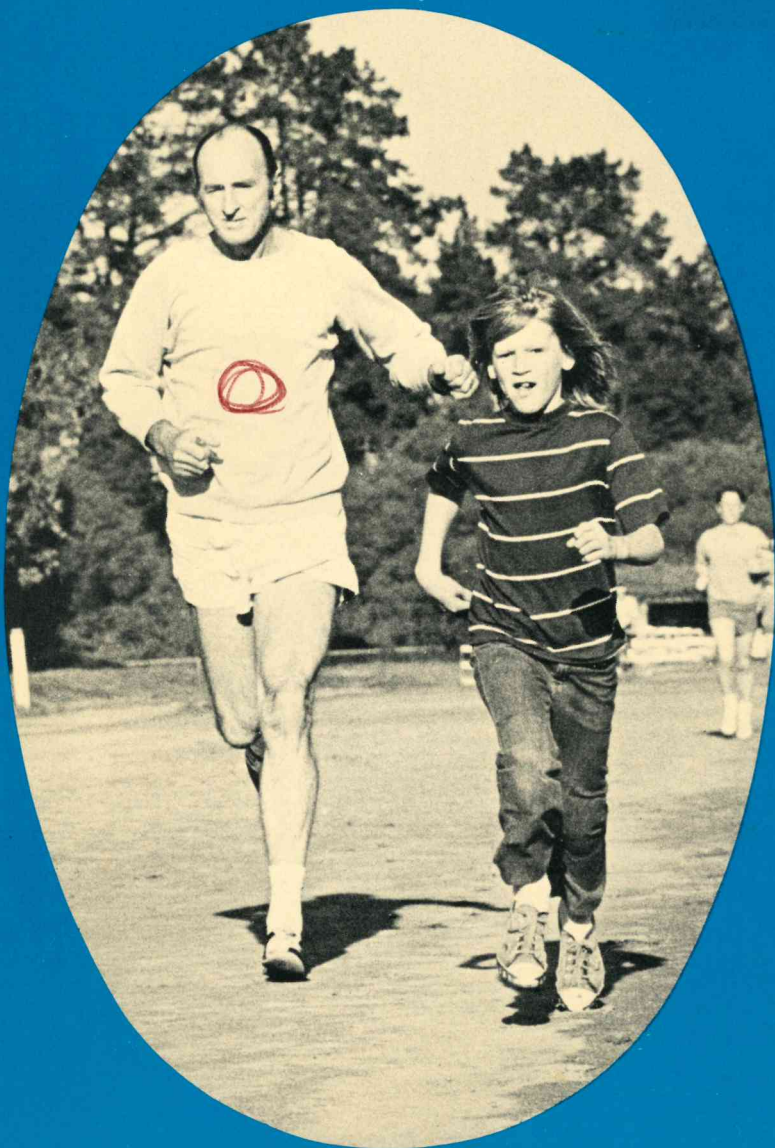


BEGINNING RUNNING



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Beginning
Running

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COVER PHOTO: Photographer Stan Pantovic's portrait of a runner, who like all runners had to go through the uncertain steps of starting.

FOREWORD

We have an "understanding gap." Beginners in the sport can't understand and appreciate what it means to be a fit runner. And runners who are deeply into it have an equally hard time remembering what it felt like to be a beginner. This booklet intends to bridge the gap between the two—helping beginners become fit runners, and helping fit runners guide beginners.

The two purposes have equal importance, because beginners do need practical advice to get them through the first difficult, sometimes painful steps. And other runners who have been through these steps themselves are in the best position to give this advice—if time hasn't faded the memory.

Running needs a good selling job, and both the buyer (beginner) and seller (runner) need to be well-armed with facts before starting.

The world is filled with unfit people who would rather be fit. Word on the effects of exercise has gotten through to them in recent years, but has succeeded in creating more fear and guilt than positive action. These people say, "I should start exercising—jogging or something," with the same conviction that they promise, "I'm going on a diet tomorrow." Tomorrow seldom comes.

The idea here isn't so much to convince would-be runners that running is valuable. Most are already well aware of that, and of how far they are from it. The real chore in the selling job—whether the beginner is getting his advice directly from a book, or if he's getting it from a running convert—is to translate wishes into work.

All talk about "fun-running" aside, the first steps in running are hard work—at least for anyone past his teens and carrying the accumulated wastes of too much food and too little exercise. It isn't very much fun at first, and this is the problem. An embryonic running career is a fragile thing, and unrelenting pain can shatter the best intentions—unless the beginner has firmly in mind that his experiences are normal, and that better ones lie ahead.

The advice here centers on how to get through the hardest part safely and as painlessly as can be expected, so the real running can start once basic fitness is established.

After touching lightly on the reasons for starting running—what it can and *can't* do—we spend most of the rest of the booklet between the first halting step and the point where beginners are sufficiently hooked to call themselves fit runners.

We describe a variety of preliminary conditioning methods—all beginner-tested and found effective. In plain, unemotional language, we spell out the expected sequence of development and specifically how to measure it. After this, there is a chapter on where to go once fitness is established.

For all the hardships of starting, it can be an exciting time. Never again will body changes come so quickly or be so profound. One morning, several months after starting, a man realizes the mile he couldn't finish at first has grown to three or four miles, and it still leaves him hungry for more. The necessary initiation ritual is over.

Chapter One

Preliminaries



LOOKING FOR A CHANGE

"All this talk about longevity is killing physical fitness. When the harassed American male hits his easy chair at night and says, 'If life is so short, why was this day so long' you won't score any points telling him how to live to be 90. The function of physical fitness is to add quality to our lives rather than quantity. The way to fitness should be enjoyable, convenient and not too time consuming."

—George Sheehan, M.D.

So you want to run? We're assuming that someone or something has already sold you on the idea that running is good for you, and that now you're trying to find out *how* to start.

People decide to start running basically because they want a change in their lives. They catch a glimpse of themselves as they can be. A fat man sees himself thin. A weak-hearted man imagines a slow, strong beat. A non-athlete gets a vision of himself competing.

People start running because they are dissatisfied with their present condition. They get scared by the heart attack statistics, or shamed by a bulging paunch, or startled by the gap between an athlete's fitness and their own.

The reasons for starting running are often negative—people not liking what they are and wanting something else. Literature has focused on the negative, stressing the disastrous consequences if you *don't* exercise. If it opens the door to running, the "run-or-die" school of thinking has served a worthwhile purpose.

But beginners should realize that running is a long-term investment. It can take months just to establish basic running fitness. And it takes almost daily running, year round to maintain it. Fear, shame and will-power alone aren't enough to support this kind of commitment. A more positive attachment to running has to come during the beginning process, or it won't last.

You're already sufficiently scared, shamed, or startled and are planning to start. So there's no need for us to recite those awful statistics about obesity and heart disease, or to offer running as a cure-all. You've made your decision. The point here is not to convince you that running is the thing to do, but to talk about means of establishing a comfortable, habitual, enjoyable running habit.

We'd be lying to you if we said it will be easy, natural and fun right from the start. It takes time to undo old habits and to clean out a sloppy system. Radical physical and emotional changes are going to be happening in you the next few months. Some won't be pleasant. But be assured that by taking one slow step at a time, you're steadily moving away from the current condition you apparently don't like.

The thing to do now is start. A few days of running will answer more questions, more effectively than volumes of writing. But first, a few preliminaries to let you know exactly what you're getting into and why. A few principles and precautions have to be mentioned again, in the name of understanding and safety. These will help you get through this tough period with your body and your ideals intact.

THE CASE FOR RUNNING

Kenneth Cooper, author of the influential *Aerobics* books, makes a distinction between health and fitness. The doctor says, "A physician might classify his patient as being physically fit if he is free from disease. A weight-lifter might say he is physically fit if he has large bulging muscles. A young lady might consider herself physically fit if she has a lovely figure. Well, unless you have good cardiovascular-pulmonary fitness, you're not fit."

Health and fitness are two different states, Cooper implies. Health is the absence of disease and injury. The individual doesn't look or feel bad. Outward appearances in the case of the muscular weight-lifter and the shapely young lady may be pretty good. But fitness is more than that. It is the capacity for performing strenuous endurance activity without damaging health. It is more than feeling "not bad." It is feeling really good, before, during and after strenuous work.

Health is the first step, and fitness comes next. A person can be healthy and unfit, but not fit and unhealthy. Being fit means not only having a body that looks good, but having a strong engine inside to keep it operating.

The engine is what we're most concerned about here. Modern man has frightfully unfit engines. The sedentary life style is to blame. It doesn't adequately provoke the heart, blood system and breathing apparatus. Without regular use, they go flabby and sluggish. When called on to work hard, these systems simply can't respond in the way they were intended.

The key to tuning up the internal systems is to reinject adequate supplies of oxygen. The oxygen triggers a chain of chemical reactions that have profound and positive results on the entire body-mind complex—and particularly the heart, blood vessels and lungs.

"Aerobic" exercises—those moderate but prolonged activities that supply oxygen in the needed doses—are given credit for a vast number of cures, from coronaries to constipation. Some of the claims are exaggerated. But researchers have definitely established a link between exercise and a number of degenerative illnesses. The most significant one is heart disease, which is an epidemic in civilized countries. Low-intensity aerobic exercises are widely believed to have an immunizing or rehabilitative effect on the heart.

Running is one of many aerobic exercises. Long walks, bicycling and swimming also work on the same principles. Other activities give less return.

Running has two main advantages:

- *It is convenient.* It requires nothing special in the way of equipment, facilities, skill, or companions. You can do it wherever and whenever, however and with whomever you want.

- *It is fast.* Every minute of running gives at least twice the aerobic benefit of any of the other primary exercises. An hour's running a week—no more than 15 minutes a day, four times a week—brings a runner to minimum fitness standards.

Running works minor magic, both inside and outside, on an unfit person. The changes come fairly quickly in the beginning stages. But they can only come if the approach is correct.

THE PERSONAL FACTOR

The missionaries of running like to fantasize about millions of slim, smiling runners retaking the streets from the automobiles. It isn't going to happen. The numbers of runners will stay relatively small because the appeal is going out for the wrong reasons, to many of the wrong people.

The appeal is based on "Run or die!" thinking.

George Sheehan, a runner and medical doctor, is an outspoken critic of high pressure scare tactics which urge people to start running. He agrees that the unfitness statistics which are a key in the "scare" argument, have little lasting effect.

Sheehan writes, "The statistics tell us everything except why people run, and cycle, and swim, and enjoy using their bodies." He says the committed runner isn't too concerned with pre-mature death. His attachment to the sport is more immediate and positive. He runs because there are features about it that he honestly enjoys.

"A composite of this latter-day athlete would show him to be little different from everyone else on the block. The future concerns him little. He is practically and philosophically a 'today' person—a member of the 'now' generation, whatever his age. Instant gratification is his mark."

"And he is willing to let you in on the secret. Running pays off, and it pays off today. Exercise gives instant and exhilarating effects. There is a natural high to be obtained legally by runners."

Sheehan doesn't limit his list to runners. He opens it up to all athletes who get gratification from their activity. He doesn't recommend running for everyone, but says to choose an exercise that suits the individual.

He explains, "We must tailor the addiction to the addict. Pick his sport according to his body build, his psychological needs and the demands of his culture. The 5'6", 130-pound loner will find satisfaction where the corpulent, gregarious *bon vivant* would go nuts. The broad-shouldered, well-muscled extrovert is in an even different category. Some people need contests which are essentially a struggle with self, and others need games which are a classroom in interpersonal relationships. And those games may have to be games of chance or skill or strategy, depending on the individual."

No one has to run. Some persons should not run, because the benefits it gives to the physique are wiped out by the wear and tear on the psyche.

Dr. Meyer Friedman, a doctor who advises his patients *not* to jog, comments on the personality factor:

"We have begun to suspect that it is the type of man who wishes to indulge in exercise, rather than the type of exercise itself, which may be responsible for the possible benefits. I would therefore counsel any man to indulge in physical activity, but with these admonitions. Indulge in physical exercises that still allow you to think, dream and act like a human being.

"If a person is jogging for a short time over a limited area—which may be a cinder track or have a minimum of scenery—and he is stopwatch-intent on this sort of running, then thinking great thoughts is literally impossible. The best they can hope is that after they're through with their shower they feel refreshed."

PRE-RUN SAFETY CHECK

Every sensible exercise program starts with this warning: "Get your doctor's okay first." The problem here is that there are different kinds of doctors, and different kinds of tests.

There are strongly pro-exercise doctors, but at least equal numbers who are strongly against any form of strenuous activity. Some believe in pushing the limits to stimulate adaptation to stress. Others are cautious. Do you accept one man's go or no-go verdict as law?

One doctor may strap on the blood pressure sleeve, listen to your chest, review your history and announce his decision. Another may put you through an exhaustive series of tests. The two types of examinations obviously don't have equal weight.

Evidence favors the pro-exercise doctors. Experience with beginners of every age and physical condition indicates that almost anyone can respond favorably to exercise programs. This needs a qualifying statement, though, and it is vitally important: "...provided the stress is moderate, within the individual's physical capacity, and is closely supervised."

The supervision starts with the pre-exercise medical check. It is intended not so much to point out obvious physical defects, but to uncover invisible ones. Hidden ailments, like so-called "silent heart disease," can react violently and unexpectedly to sudden stresses like running. Other dormant conditions can be aggravated.

It takes more than cursory checks to uncover hidden threats. And new physical testing methods are being developed to help in this area. Dr. Kenneth Cooper has developed guidelines for testing pre-exercisers.

"The main objective of this examination," Cooper says, "is to spot heart, lung and blood vessel problems that could make exercise potentially dangerous. This is especially important for older persons who are more likely to be affected by such problems."

The age-graded tests:

- *Under 30:* physical check-up within the past year, showing no irregularities.
- *Ages 30-39:* check-up within the past three months, including an electrocardiogram (ECG) taken at rest. (ECG is a tracing of heart activity.)
- *Ages 40-59:* same as for the 30-39 group, with the addition of an ECG taken *during* exercise of approximately the same intensity as proposed program.
- *Over 59:* same as 40-59, but examination should occur immediately beginning the exercise program.

Cooper says, "If coronary weakness or some other defect shows up, exercise must be scaled down to levels of physical demand that your heart can meet safely." Note that he doesn't rule out exercise completely, even for those with irregularities. He simply says to allow for the problem. Certain diseases do preclude exercise, but they're probably so obvious to both doctor and patient that neither will be considering strenuous exercise to begin with.

Dr. Cooper now operates The Aerobics Institute in Dallas, Texas. A

combined clinic and exercise study center, it specializes in preventive medicine. Patients are advised on their physical capacities, and are given programs tailored to their needs.

The testing is thorough. It includes 18 different blood tests. Height, weight and blood pressure checks. A measurement of the body's fat content. Chest x-rays to tell the size and condition of the heart and lungs. Pulmonary function tests which indicate the ability of the lungs to deliver oxygen.

Finally, Cooper's patients go through a resting ECG, followed by a "stress test" on the Institute's treadmill. While the individual runs, his general condition, pulse, respiration and ECG tracing are carefully monitored.

Cooper reports 85% success in uncovering evidence of latent disease in the heart and arteries, using this method. Without stress testing, many of these problems would have gone undetected—possibly until it was too late.

He repeats that these symptoms "do not rule out exercise. To the contrary, in some cases exercise helps reduce their symptoms. But medical judgment and supervision must be applied to each individual case."

SELF-EVALUATION

Knowing your own capacity *and limits* is important. And there are a number of areas in this knowledge that don't require a doctor's examination.

Be honest with yourself, even before starting running. Because running has ways of making you face realities later on if you don't face them now. Those ways aren't pleasant.

- *Age:* If you're under 20, you shouldn't be far removed from robust fitness. Unless an unusual ailment is standing in the way, your conditioning period should be short and fairly painless. People lose their shape quickly in the 20s, but still imagine themselves as young athletes. Be careful. From 30 on up, be doubly careful. External and internal deterioration won't correct itself overnight. Act your age.

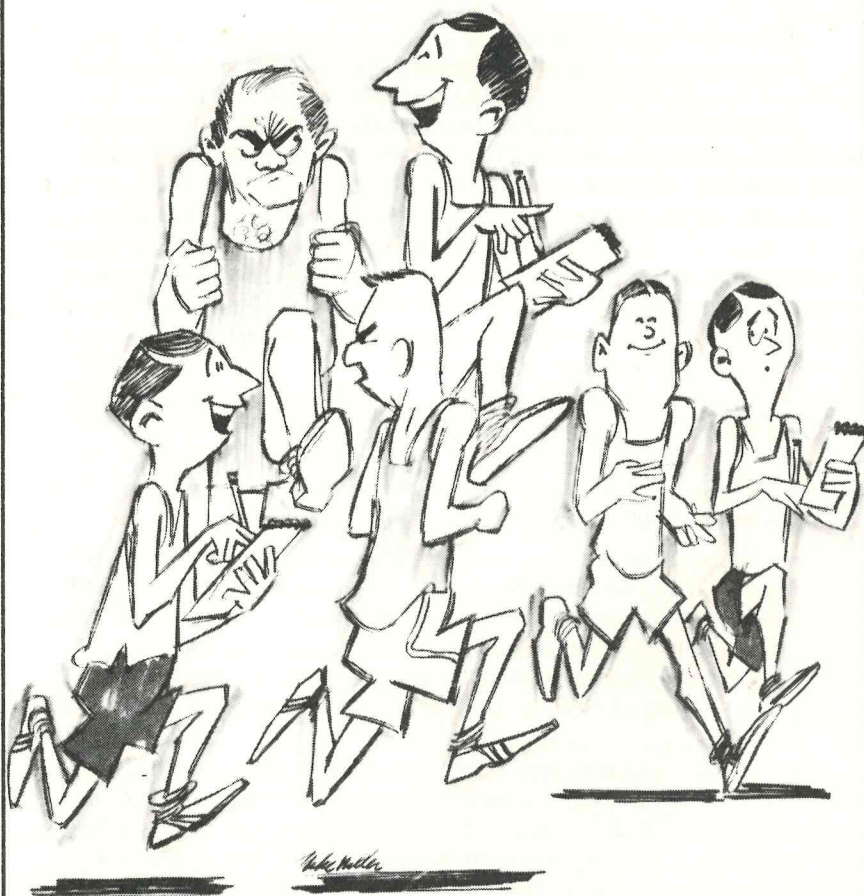
- *Weight:* Excess weight adds burdens, inside and out. It is the main stumbling block for beginners of all ages. A good formula for figuring average weight is this: 110 pounds plus 5½ pounds for each inch over 5'0" (for women it's 100 pounds plus 5 pounds for each over 5'0"). If you're over average weight for your height, adjust for the load while shedding it.

- *Exercise Capacity:* Try walking—not running, just walking at a good steady clip—for 10-15 minutes. We say 10-15 because that is the recommended time period for beginning runners. Is this walk a strain? Are you tired? Are you breathing so hard it's difficult to talk? Is the pulse pounding along at faster than 120-130 beats a minute? If the answers are no, you're in decent enough shape to start. But if you say yes, you'd be wise to walk some more before running.

- *Activity:* You may have a head start without even knowing it. A number of exercises are like running in their effects on the circulatory and respiratory system. Walking is one. If you customarily walk healthy distances as part of work, or hike for recreation, you start ahead. Bicycling is beneficial, too, and so is swimming. However, the latter two don't give the same foot-to-ground contact as running and walking, and muscles may need toning. Other active games and sports don't give big endurance gains. But if they've kept muscles strong and weight low, so much the better.

Chapter Two

Basic Training



THAT FIRST BIG STEP

"How you jog is never as important as that you jog. Performance is what counts. It is always more important than technique.

—Bill Bowerman

How do you start? By taking the first step. The first step is the longest and hardest one. Although this is a glib answer to give you when you're looking for hard facts, it's the best possible answer. Don't think about it any more. Go out now, today, and start putting one foot in front of the other. It's that simple, and that difficult.

We intellectualize too much about running. We complicate it too much and make it sound like too much of a chore. We talk too much of times, schedules and formulas. When, where and why. Form, diet and injuries. Equipment, facilities and formal structures.

You don't really need so much of this. You don't need to get fancy in what you do, where you do it, and what you do it in. You don't need to be a student of the sport or an expert in physiology.

All you need to know is the general direction you want to go and the general route needed to get there. You already know the first. The second is surprisingly simple. We can outline the basic principles of running training in a couple of minutes (and will in this chapter).

The principles are as universal as they are simple. They apply to Olympians, same as beginners. Seventy-year-olds and seven-year-olds are bound by the same physical laws. So are men and women. The only differences are in amount and intensity of application.

After overcoming your inertia, the next big job is getting acquainted with yourself as a runner. Learn to evaluate yourself, your motives and your reactions as you go along. The body and mind give off distinct sets of signs. Knowing how to read and interpret them is a major boost towards fitness.

Be realistic about this. You can't fool yourself for long. Do too little running and you won't get fit. Do too much and you'll break down, one way or another. The body's signs will tell you where the happy medium lies.

Keep goals in line with reality. Remember, you are a beginner. As Kenneth Cooper has said, it has taken you years to get unfit. Don't expect to get fit again in a matter of days. If you're goal-oriented, establish a set of intermediate goals that are well within reach. For instance, start by aiming at one mile—even if it's all walking. Then gradually work up to running the whole mile. Then add a bit more. It helps to have goals, and it hurts to have goals—depending on what they are.

Plunge into running—cautiously. Stick with it. Give it a fair test. Promise yourself you'll stay with it for at least a month, no matter what. If you seem to be doing everything right by that time but aren't progressing, and worse yet you can't stand doing it, maybe your body is trying to tell you something. If the overall effect of running seems bad, maybe you'd like bicycling or swimming better.

THE UNCHANGING LAWS

Old or young, fit or unfit, male or female, fast or slow, all runners operate under the same conditioning principles. If a principle is sound at one level, it will work on all levels. The difference is in the way the methods are applied. They are scaled to individual abilities.

The bulk of all distance runners' running is done at a pace which allows normal breathing. In technical terms, this is called "aerobic" running—meaning "with oxygen." Dr. Kenneth Cooper has named his entire system *Aerobics*. Cooper has tested his program extensively, and has written three books on the subject (*Aerobics*, *New Aerobics* and *Aerobics for Women*). He is the leading popularizer of running for fitness.

Cooper writes, "The main objective of an aerobic exercise program is to increase the maximum amount of oxygen that the body can process within a given time. This is called your 'aerobic capacity.' It is dependent upon an ability to (1) rapidly breathe large amounts of air; (2) forcefully deliver large volumes of blood, and (3) effectively deliver oxygen to all parts of the body. In short, it depends upon efficient lungs, a powerful heart and a good vascular (blood circulation) system. Because it reflects the conditions of these vital organs, the aerobic capacity is the best index of overall physical fitness."

The best distance runners uniformly have strong and slow hearts, low blood pressure, and high oxygen intake and utilization capacities. They also have low body weight and fat—meaning they have powerful engines inside of light frames. They weren't born this way. Aerobic exercise developed these traits, and will do the same for anyone training along similar lines.

Arthur Lydiard popularized heavy aerobic training for competitive distance runners during the 1960s. The New Zealander also set off a minor "jogging revolution" in his own country, using the same principles of steady-paced distance running.

"Jogging is running," Lydiard says. "It's training as a runner. Basically there should not be any difference in the approach to be made."

Another standard method of training distance runners is the "interval" principle. As originally conceived, this system of alternate running and walking (or easy jogging) allowed a man to cover more distance, easier. Ernst van Aaken, a German doctor and coach, uses the interval format for all runners who are attempting to increase their distances.

Van Aaken says the beginner can expect to be running five kilometers (three miles) very soon by inserting walking breaks as needed into a slow run. "To reach this level," he notes, "one must insert many walking breaks at the beginning, perhaps for a minute every 400 meters. Thus children eight years of age and senior runners beginning at age 50 will immediately reach five kilometers in training. Even coronary patients have been, and are being, trained this way.

"The runner of the future will not train differently from anyone else. Open runners, striving young middle and long distance runners, children, old men, women—all will just run playfully in a state of respiratory balance (aerobically). There must always be the desire for and joy in running more, and the ability to do so."

BASIC TRAINING PRINCIPLES

1. Stress. Running is a stress, and the underlying principle of all training is adapting to stresses. Stress must be regular and strong enough to stimulate adaptation. But it can't come in such heavy and frequent doses that it overwhelms the adaptation system, causing a breakdown. The secret of training is finding proper doses of stress, and recognizing the symptoms of over- and under-stressing.

2. Specificity. This means that the system adapts to the specific exercise it is given. Walk and you become fit for walking. Do pushups and you become a proficient pusher-up. Run and you get in shape for running. The effects are even somewhat specific within running. There are differences between sprinting and endurance running fitness. A runner training for endurance must practice endurance activities.

3. Training Effect. Endurance training does several things. It increases the efficiency of the heart and lungs (circulatory and respiratory systems in general), reduces body fat, tones and strengthens muscles and other connective tissue, and promotes a feeling of health and well-being—both mental and physical. In this condition, trained individuals are prepared to handle work more effectively—with less stress.

4. Oxygen Usage. According to Kenneth Cooper, "The key to endurance training is oxygen consumption." Endurance athletes need super-supplies of oxygen. Training does two things: it not only gives the large supplies, but tunes up the system which carries it. "Aerobic" exercises are those which allow normal breathing. "Anaerobic" ones result in a shortage of oxygen—labored breathing, or an "oxygen debt." Endurance running is primarily *aerobic*, while short fast runs are mostly *anaerobic*. Since the anaerobic capacity is limited by one's aerobic level, runners should have a good endurance background before doing hard running. In other words, go long before going fast.

5. Regularity. Conditioning occurs fairly quickly. Runners can reach adequate fitness within a matter of months. But the reverse is also true. Conditioning *vanishes* quickly if it's neglected. To gain and maintain endurance fitness, a runner needs to practice at least every other day, with no long layoffs throughout the year.

6. Staggering. Coaches Bill Bowerman and Arthur Lydiard both recommend varied daily distances and efforts. They advise against running the same amount every day. Instead they say mix the runs. Take a longer one; follow it by a short easy run or two—or even a day of rest; then take a medium run; then another short one, and so on. They say this program allows adequate recovery time, provides mental change of pace and stimulates fast physical improvement.

7. Progress. Runners can go on gaining endurance almost indefinitely, so long as they increase their running in small steps—and within the stress limits. Progress, however, doesn't go in a smooth upward curve. There tends to be a "plateau effect," with a series of sudden jumps separated by stagnant periods. The runner has to be prepared to work through these periods of no apparent improvement, waiting for the jumps.

8. Pacing. Pace has two meanings. One type is obvious. This is the speed a runner goes during a run. The other is less obvious, but just as important. This is the kind of pace he maintains week to week, month to month. One principle rules *both* kinds of pacing: the harder and faster you go, the shorter you're able to go; with easier and slower pacing you can run longer. Set the pace according to the distance of the run—or the projected length of the career.

A PLAN FOR BEGINNERS

Start with two aims firmly in mind: (1) to establish basic fitness for running, and (2) to make running a habit.

The first, in most cases, will mean shedding excess weight, toning up inefficient respiratory and circulatory systems, and correcting muscle-tendon weaknesses. All these things take time and patience.

"The average American," Dr. Kenneth Cooper says, "takes 20 years to get out of condition, and he wants to get back in shape in 20 days. You can't do it. If your heart tolerates it, your legs won't."

It is said, in reference to the second aim, that running is an addiction. Committed runners are healthy addicts, who suffer withdrawal symptoms if they go three days without a running fix. It takes time to get addicted. Running takes hold of you slowly, and appreciation of it only builds in tiny steps. The basic training period is where old habits of physical inertia—of *avoiding* exercise—are shaken off, and where running is made as normal a part of the day as getting up and brushing your teeth.

The advice offered in this section is the meat of the booklet. This is basic methodology—the "how" of running. It is the best available guidance, presented in the simplest possible terms. The idea is to get the beginner fit and hooked in the strongest, fastest and above all safest manner.

SUMMARY OF SUGGESTIONS

Bill Bowerman. Kenneth Cooper. Arthur Lydiard. These three men, not necessarily in this order, are the Big Three of Running for Fitness. Alone and in combination, they have sparked the "jogging revolution" in the United States and elsewhere.

Bowerman is the track coach at the University of Oregon. He traveled to New Zealand in the early 1960s and met Lydiard, a coach from that country. Bowerman started running himself. He came back to Oregon and spread the word. Now his hometown of Eugene claims it is the "jogging capital of the world" with some 5000 converts.

Lydiard, a onetime international marathoner, translated his highly successful endurance training methods into schedules beginning runners could use. A dynamic speaker (one writer has called him "the Billy Graham of fitness"), Lydiard roams the world talking up his methods.

Dr. Cooper is a scientist. His major contribution has been to put endurance training on a sound scientific footing. He has test results from nearly a million subjects to back up his claims.

All three have written books on the subject. If you want to get deeper into the whys and ways of running, read Bowerman's *Jogging*, Cooper's *Aerobics* and *New Aerobics*, or Lydiard's *Jogging the Lydiard Way* (also *Run For Your Life*, which is about the Lydiard method).

The suggestions here are a synthesis of the successful Bowerman-Cooper-Lydiard plans, which share many basic principles. The vital ones:

- **Cover 10-15 minutes.** According to Cooper, it takes between five and 10 minutes of continuous movement before the "training effect" (see Training Principles) is activated. It takes this long to get the kinks out and to get the

strides and juices flowing. So anything much less than 10 continuous minutes won't contribute much to conditioning. The three experts agree that 10-15 minutes, regularly applied, gives an adequate workout. Start at this level on Day One (unless preliminary tests have indicated that condition is so low you can't walk this length of time comfortably; then remedial work at lower levels is advised). If you prefer, a one-mile workout may be substituted. If so, *do not* time the mile. Time and distance should not be combined at this point, because they stimulate competition.

- **Use the "talk test".** This is Bowerman's term. He says if you can talk while you run, you're okay. If you're gasping, you're going too fast. As the Training Principles indicate, oxygen intake should be regular and adequate to meet immediate needs. Slow pace insures a full supply of oxygen. The "talk test" insures a slow pace.

- **Train, don't strain.** This is Lydiard's catch-phrase. It is a valuable one to remember, not only as a beginner but throughout the running career. Running should *not* be exhausting, particularly at this stage. Lydiard says runners should not go beyond the limits of "pleasant tiredness" in their training.

- **Employ "intervals" if necessary.** Start the 10-15-minute (or one-mile) period with the intention of running as much of it as you can, remembering to keep it aerobic and strainless. Set off at an easy shuffle, little faster than a walk. If breathing becomes labored or pains set in, slow to a walk. Keep walking, briskly, until you feel recovered. Then run again. Repeat the process, as necessary, until the time (or distance) runs out. Some beginners will run the whole thing. Some will walk most of it. It doesn't matter either way, so long as you do it. Trust your own body signs and reactions.

- **Progress at your own rate.** Each runner has to establish his own starting point, his own standards of progress, and his own criteria of success. But no matter what the specifics are, each person needs to feel he's progressing—whether from walking a full 10-15 minutes to running the whole way, or starting with that and working on up. In running, progress is easily measured. Use time (or distance) and your reaction to it as the best guide.

- **Be regular.** Progress won't come unless you practice the new activity at least every other day. Remember, too, that rest is important—particularly at the beginning when the body is going through drastic changes. Every-other-day running is an application of Bowerman's "hard-easy" principle. He says progress comes quickest when you alternate days of effort with easier days (in this case, rest days). Later there will be other variations of this theme, such as increasing the length of certain runs.

- **Allow time.** The experts say it takes deconditioned individuals from one to four months to get "over the hump," to the point where 10-15 minutes of running at least every other day is taken easily and eagerly.

- **Avoid the "Stopwatch-Schedule Syndrome."** There's a thin line separating useful plans and times from those which are dangerous. Goals are good and necessary, but only if you remain in charge. When you become a slave to them, they start hurting.

DR. COOPER'S POINT COUNT

Kenneth Cooper's "aerobics" program revolves around a point system which says, in effect, "Do whatever exercise you want, at whatever speed you want to do it—so long as it adds up to at least 30 points a week."

The point system is a Cooper invention. It reduces a mass of complicated data into a simple formula for measuring oxygen consumption, distance and pace all at once. Dr. Cooper writes:

"With the aerobics program, we try to answer three basic questions: the type of exercise, how to compare exercise, and how much is necessary. We do it by a point system. The points are related to the intensity and duration of the activity."

Cooper has found that a mile in 15-20 minutes is worth one point. (At this rate, a person most likely would be walking.) When the pace drops to 12-15 minutes, the same mile earns two points. At 10-12 minutes, it earns three. At 8-10 minutes, four points. At 6½-8 minutes, five points. Twice the mileage at a constant pace earns twice the points.

The point system measures the amount of effort expended. And, Cooper states, added effort yields added training effect—so long as the exercise remains aerobic in nature.

The doctor claims that the point system, properly used (i.e., as a guide instead of a competitor), is the best practical measure on conditioning. "In hundreds of studies," he writes, "we have discovered that it is easy to predict oxygen consumption and fitness based on points, but difficult to predict it on miles alone. If you tell me you are running 20 miles per week, I'm not quite sure what your level of fitness will be. But if you tell me you are averaging 100 points per week, I know that you are in excellent condition.

"The point value assigned to each exercise indicates that amount of oxygen consumed by the body during a particular activity. More points mean more effort expended—that is, more oxygen burned in the body at a faster rate. In short, the point system measures the energy cost of exercise.

"From testing and training thousands of men and women, I have been able to show that roughly 80% of the people who follow the progressive programs and work up to 30 points per week can reach our minimum standards of fitness."

By "progressive programs," he means working gradually up to the 30-points-a-week level. Point calculations are useful in the conditioning phase, too, he says. "Because the point charts let you measure the amount of effort you expend, you can now take exercise in *progressive* doses. And this is vitally important. In fact, it is the key to the aerobic conditioning program. The body must gradually adjust itself to increasing amounts of exercise. Too much too fast can be as damaging as too little too late."

Regardless of whether beginners want to go about conditioning by counting points or not, Dr. Cooper's 30-point end result is a worthwhile goal. A 10-15 minute run five days a week easily puts the runner past that minimum—and out of the "beginner" class.

WHEN, WHERE AND HOW

“So what do you do? You go to the park, or track, or forest trail, or on the road, or anywhere that you believe you can run. Now you are not going to see how far you can run, nor how fast. You are going to look at your watch prior to starting and you are going to be exercising for 15 minutes—at your own level.

“You start off at a slow run, not fast, and you keep going at a speed that you feel happy about. If you become too tired—to the extent that you are breathing rather hard—and you start to feel a little uncomfortable, then it is time to walk for awhile until you are ready to jog again. You continue this, walking and running alternately, until the 15 minutes is completed.

“All the time you have been exercising, you have been placing only enough duress upon yourself to make yourself pleasantly tired. Pleasantly tired is the key to jogging and even training for competitive running. Only you as an individual can know when you are pleasantly tired. And as long as you are prepared to run this way you will learn to enjoy running and also will continue to improve your general condition.”

—Arthur Lydiard

RUNNING FORM

Before you take the first step, a word on how to take it. Beginners are self-conscious, which is understandable. They haven't done formal running, but have only seen others run. They have a mental picture of what a runner should look like, and the picture is often distorted.

The result, in the early efforts, is awkward form with exaggerated movements. The knees lift too high. The feet kick back too much. The stride is too long. The arms and shoulders are out of synchronization with the legs.

A runner attempting to look pretty usually produces just the opposite effect. And tires himself needlessly in the process. There isn't any energy to waste at this stage. So rather than trying for stylized movements, just concentrate on running efficiently.

Running is different than walking. The runner breaks contact with the ground every step. He pushes and pounds, while the walker uses a pulling motion. So even though the running may be slower than a fast walk, breaking contact is important for the different muscles it uses and builds.

Running efficiently means running with a relaxed shuffle—strides short, knees and kickback kept low, feet close to the ground and landing nearly flat. This is related to pace. Stride length, knee lift, kick and foot plant all become more exaggerated the faster a runner goes.

Beginners picture running form in terms of racers—fit runners going their fastest. They don't realize that this form is totally unsuited to paces at the slowest end of the scale.

At any speed, the head is a big factor in setting style. Beginners often run hunched over, as if they're about to fall on their faces. It comes of watching their feet. Look up at the horizon. The feet can take care of



themselves. Looking ahead straightens the back. It takes pressure off the legs. And it makes for much better scenery.

HOW MUCH?

Kenneth Cooper says start by running what you can in 12 minutes. Arthur Lydiard sets beginners off with 15 minutes, instructing them to do what they can, "pleasantly." Bill Bowerman's neophytes get going with a workout totaling no more than 10 minutes.

Why 10-15 minutes and not five or 25?

Researchers have discovered that 10-15 minutes is an optimum period for training. As noted earlier, the "training effect" begins between five and 10 minutes, and the runner is getting full effect by the time he stops. With a run of this length, the runner has enough time to get unwound, but doesn't stay at it long enough to get completely exhausted.

Several years ago, a physiologist named Jack Wilmore ran a significant series of tests at the University of California. One sample group ran 12 minutes (covering 1½ miles in that period). The second group went 24 minutes (three miles). Each trained for 24 weeks like this. It was assumed that the group running twice as long would show more training effect. The question was how much more.

Surprisingly, Wilmore found, "There was no statistical difference in results (fat loss, pulse reduction, oxygen uptake capacity, etc.) between Group I, the 12-minute runners, and Group II, the 24-minute runners." He concluded that the returns of running diminish drastically after about 12 minutes.

This evidence indicates that beginners should go immediately to 10-15-minute workouts, and fill the time with running as they are able.

Why 10-15 minutes rather than, say, 1½ miles? This is a practical and psychological matter. If you run by time instead of distance, you need no track or measured course. Only a wristwatch. You can run anywhere. The watch gives the only needed measurement.

Distance makes you want to go faster. You can see it spread out before you. You can see the end. If you slow down, it takes longer to get there. But time is different. It is invisible. It isn't dangling before you as a goal. And no matter how slow you go, it passes at the same rate. Speed has no premium now—only penalties. So it's better not to hurry or to know how far you are going.

Start with 10-15 minutes. Run it, walk it, or run and walk it, so long as it's not too uncomfortable. This is the way Arthur Lydiard tells beginners to start.

Lydiard says, "It is not a question of the distance covered being of importance, but the fact that the person is exercising within his individual capacity to exercise this way. For instance, when starting off a runner it is always wise to tell the person to run down the road for five or 10 minutes and then turn around and run back in the same time. If the runner took

LEFT: There are no age limitations in running. It appeals to every extreme—as evidenced here. (Steve Vess photo)

10 minutes to run outward and 15 minutes to return then there is little to say to him or her because the person would know that they ran out too fast. In other words, the runner is getting to grips with himself or herself. The person will learn about his or her own capabilities and degree of fitness.”

Establish a set of intermediate goals that are within reach. The first is simply to go 10-15 minutes. The next one is to steadily cut down the amount of walking while increasing the running. Don't try to increase the time until you can handle 15 minutes without walking. From this state, there are two ways you can go.

- *The distance can increase.* The best way to do this is to add perhaps five minutes to one run a week, while keeping the others the same. Once that one is twice as long as normal, then increase the average daily run somewhat. And so on. Keep the “double-time” run in the schedule. It stimulates fast, solid endurance gains.

- *The pace can increase.* As condition improves, runs naturally get faster with no corresponding increase in effort. Pace is the subject of the next section.

Or you can stay where you are. Drs. Wilmore and Cooper agree that 10-15 minutes of running a day meets minimum standards. If you get to the point where you can do the same thing, easier, that's progress too.

HOW FAST?

Kenneth Cooper used to recommend a 12-minute test for every beginner. It involved seeing how far one could go within the time limit. The result told where he stood on the conditioning scale, and where training should begin.

Cooper doesn't make the 12-minute test a requirement any more. It was misinterpreted. People took it to mean an all-out race, and long-dormant competitive juices started flowing. In testing Air Force personnel, two subjects died after the 12-minute run.

Though Dr. Cooper has an iron-clad defense for his methods, he has modified this part of them.

“I no longer recommend the *initial* 12-minute test,” he says, “because it can be dangerous for a man past 35 or 40. I know it's discouraging for men who can run a mile, who have a lot of natural ability, and who want to go much faster than the book suggests. But in the long run this is the way to avoid problems. Don't jump directly into the middle of an aerobics program. If you've been inactive for a period of years, start gradually on a six-week progressive schedule. Then take the 12-minute test if you care to. Using this method, you'll virtually eliminate the risks and problems.”

Cooper, now the director of The Aerobics Institute in Dallas, is collecting information on running-related deaths. He says documented reports from physicians have shown him a “common denominator” among runners who have died.

RIGHT: Dick Gregory (Y4), the comedian and political activist, caught the running bug and ended up running the Boston marathon. (Jeff Johnson photo)



He writes, "I found that they are usually over 40 years of age, in their first six weeks of a jogging program, and with no medical clearance before starting to exercise."

He explains the dilemma of that test, and why he downgraded it:

"On the one hand, we were saying 'don't push.' But on the other we were penalizing those who *didn't* push. So we had people pushing."

It's a common human failing. Give a man a competitive challenge, and he'll respond to it, even when there's a risk involved. With untrained runners, particularly older ones, the risk is considerable. Speed kills. If the beginner is lucky enough to get off without a heart attack (or a leg injury from racing the clock, he's killing his enthusiasm and robbing himself of potential benefits. For what? No gain in aerobic fitness.

Forget speed. Don't combine distance and the watch at this early date. It's too tempting to race when those two get together. Either run by time (10-15 minutes on an unmeasured course), or by distance (a mile, without timing it)—not both. The result you get by neglecting this simple rule could be deadly.

Conquer distance first. Get used to running slowly, just putting in your time. Let the "talk-test" be your guide. You can't go too fast and still be talking breathing normally.

After this spell of basic training—*only* after you've gotten up to 10-15 minutes of running a day, at least four days a week, or you are handling Cooper's 30 points a week—go ahead and run a time-trial if you want. It isn't necessary, but it should at least be reasonably safe by this time.

HOW OFTEN?

At least every other day. That's the only way to get fit and to make running a habit—but running at least four days in every seven.

"Four days (a week) is sufficient for just keeping yourself in shape," Kenneth Cooper says. "Six is the maximum as far as I am concerned."

There's general agreement among authorities on this point. Run four, five, or six days. Some say seven, but it's probably best to allow at least one day of rest at first—usually more. The body needs time to catch up with itself during this time of radical change.

Bill Bowerman values rest for all runners. "The well-conditioned runner learns early," says the University of Oregon coach, "that rest is as important to his success as exercise."

Bowerman's gift to training theory is the "hard-easy" system. Under it, his competing runners take a hard workout one day, then easy off the next day or two before hitting it hard again.

"In 20 years of training national and international runners at the University of Oregon," Bowerman writes in *Jogging*, "it has been found that runners progress more rapidly and painlessly by an alternating program of hard work one day and the next day easy. Chronic fatigue states are avoided."

He has adapted this method to beginning running, recommending an every-other-day schedule. Since he doesn't advise "hard" running for beginners, perhaps "on-off" is a better description here. Bowerman says take a run one day, then rest the next—taking a light walk on the "off" days. Gradually, some of the walks are replaced by light jogging, but the principle remains the same.

The overall time investment for the beginner isn't large. He shouldn't need more than an hour of programmed exercising a week. Four days, 15 minutes a day. And yet there are people who argue, "But I don't have time."

WHERE?

Anywhere that is safe and reasonably flat. "Safe" means free from automobile hazards and obstacles that might twist delicate ankles. We say "reasonably flat" because hills put a heavy burden on the oxygen supply system, and force anaerobic running even at the slowest speeds. This creates havoc with the "talk-test" safeguard system.

Flat, smooth, uncluttered surfaces are best. Any number of areas meet these criteria. Bill Bowerman says, "Jogging country is everywhere. Open your door and you're in business. Jog right out the door. Jog in a schoolyard, on a city street, at the beach, on a country road, or in a vacant lot. Jog down a bicycle path, on a school track, around a golf course, through a park, in your backyard, in a gymnasium, in a supermarket parking lot—anywhere."

The good places to run are the pleasant and convenient ones. The most familiar and available are the places right around home. You walk there. Why not run there, too?

Many runners start on the 440-yard track at the local school. It has advantages. Privacy, away from hostile taunts. The company of other runners. A known distance each lap.

But the disadvantages outnumber the advantages. The track limits the runner to a small compound with unchanging scenery. This is the least of the problems. It may take more time to get to and from the track than it does to run. There's the risk of boredom, and the bigger risk of racing with yourself and others in this carefully measured arena. The restrictions, risks and complications created by the track limit its value as a training ground.

Running should be a freeing force, not a restrictive one.

WHEN?

Anytime, or almost anytime. There are two qualifications here. Allow time enough so you don't have to hurry. Even if it's just a 10-15-minute exercise, give yourself an hour's time for the whole process of preparing, running, showering and recovering. And don't run immediately after eating. There's enough discomfort at the start without adding this burden.

Morning, noon, or night. The run can come at any of these times.

First-thing-in-the-morning runs are probably the most practical. You have to get up and go through the dressing and washing routine at this time of day, anyway. Morning running only means getting up a few minutes earlier. Traffic is generally light then. The air is cool and clean. The big advantage is that it's hard to find excuses for *not* running at this time of day.

The one excuse is, "I'm too tired to run that early." Some people legitimately can't get started then. For them, a lunchtime or evening run might be better. If you're in a situation where you can run at noon, it's a good plan. You don't have to cut into your sleep time in the morning or your relaxing time at night. You always run in the daylight. And you replace a meal with a run. This has a double advantage.

Evening runs are the hardest to manage—particularly if they come at the end of a long, tiring work day, and before an inviting meal. It's easy to ration-

alize your way out of these runs. But they are rewarding, too. Curiously, getting out and doing vigorous physical work after a day of mental effort is relaxing. A run at sunset pumps out tensions.

Morning, noon, or night, it's wise to set aside a specific time period for running. This helps make it a habit, which is a key to the success of a running program.

So much for time of day. What about time of *year*? Running is a non-stop exercise. It is never out of season. Nothing can stop a runner from making his appointed rounds, or he won't keep his running habit and condition very long.

You learn to deal with the weather. You learn what you can stand, and when it is wise to take a day off.

Winter is the major stumbling block. Runners hesitate to go out in the cold and snow. Some say they'll "freeze their lungs." In fact, this claim has no scientific backing whatsoever. People walk, ski, skate and shovel snow in temperatures well below zero. Relatively short runs at aerobic paces aren't going to hurt any more. Competing runners train without breaks at temperatures as low as 20-below, with no ill effects.

Summer is more dangerous than winter. Heat buildup is the main enemy of all runners, and reactions to hot weather must be monitored carefully. Strangely, however, runners who are over-cautious in the winter tend to be under-cautious in summer heat.

WHAT TO WEAR

Dress for comfort and for the weather.

Bill Bowerman advises, "Whatever out fit feels comfortable is the one you should wear for jogging. You don't need to be a fashion plate with expensive clothes and footwear. Nearly any comfortable, informal outfit that you already own is appropriate."

The beginner will be self-conscious enough without decking himself out in a brightly colored, striped, stretch nylon "jogging suit" and with flashy new running shoes. The new outfit only attracts attention and writes "beginner" all over him.

Choose inconspicuous clothing. Drab, loose-fitting things allow a quiet, unpretentious beginning, hide bulges and still give free movement.

Give special attention to shoes. You don't need a pair of \$20 Runner Specials for this early mile a day. But you do need shoes that absorb shock and don't rub blisters in the space of 10-15 minutes. Any rubber-soled shoe which has already stood the test of fairly long walks will do for now.

Dress for the weather, but a little on the light side compared to what you'd normally wear for the temperature. Body heat accumulates, even during short runs. In summer, wear as little as modesty will allow. In winter, the legs and trunk need surprisingly little protection, but bundle up the head and hands.

One warning: Don't intentionally overdress, thinking you'll stimulate a faster weight loss. Rubber suits, heavy sweats and the like don't work. They drain away the water supply, throw off the body's salt balance and cause body heat to soar. The results are all negative.

Eventually, you will want to refine the running wardrobe, but that can wait until after the program has taken shape—and you along with it.

MEASURES OF SUCCESS

After watching thousands of runners go through the pains and pleasures of getting fit, Dr. Kenneth Cooper says the mental state of the beginner experiences stages like this: "First agony, then discouragement, then determination, then progress, then success, then smugness."

The rate of progress through these states of mind depends on one's starting point, and the development of positive mental attitude parallels physical development.

Physiologist Jack Wilmore ran a group of 90 volunteers through a four-month conditioning program at the University of California, Berkeley. Although the good effects of running showed up almost immediately in his tests, the gains were so small that it took about a month for most of the beginners to recognize any change in themselves. The first month is when sore legs and short breath are apt to raise the question, "Is it really worth anything?"

A runner determined enough to see this period through soon begins to notice progress. "Then," Wilmore says, "he is elated. Hooked. Some people get so enthusiastic they want to spend all their time jogging, and we have to tell them to go do their work."

Wilmore identifies a number of clear signs that a runner is adapting well to his new exercise. After 24 weeks on his controlled program, Wilmore's group had:

- An average 2% reduction in weight, but an 8% reduction in body fat content. Though weight wasn't dropping significantly, there was a big drop in flab—i.e., a redistributing of weight.
- Blood pressure decreases of 10-13%.
- Resting pulse rate drops averaging 12%.
- Oxygen uptake increases averaging 10%.

All these measures add up to a dramatic boost in body efficiency, which in turn means greater energy and work capacity.

The beginner needs to be alert to his own reactions to exercise, and aware of what is and is not normal. The most important measure is how he stands in relation to his own base condition.

Here's where a daily record of running is valuable. Make a habit of writing down pertinent information about the run and its effects. The key facts:

1. *Running time or distance* (including the proportions of running and walking, if walking is necessary).
2. *Weight* (taken at the same time every day, say before the run).
3. *Pulse rate* (taken under constant, resting conditions).
4. *Unusual problems* (aches and pains, breathing troubles, heat or cold, etc.)

These are the four key measures of progress: ability to handle running, weight reduction (if it's too high at the start), drop in pulse rate, and freedom from pain. To a great extent, all are related. They're part of the integrated process of getting fit.

REASONS FOR FAILURE

The casualty rate among beginners is terribly high. Some get hurt from running. Some get sick of running. Only a small percentage of those who start survive to see what they set out to find. The bad part of running is so bad for the dropouts that they never make it to the good.

There are as many reasons for quitting as there are for starting. But in most cases losses boil down to this: working too hard without doing enough, and expecting too much while getting too little.

The guiding principle of all running training is adapting to stress. If the stress comes in small doses, the body throws up defenses against it. Each time the stress is successfully repelled, the walls of adaptation strengthen. But when a flood of stress hits weak walls, the result is chaos.

Runners who quit early quit for two main reasons: disability or discouragement. Both usually come from trying to do too much of the wrong thing, too soon. The adaptation system simply isn't ready for this kind of stress yet, and it breaks down. The body is protecting itself in the only way it knows how. By saying "stop!"

Arthur Lydiard, the New Zealand coach, tells this story of a beginner. "Here was this guy rolling on the ground. He's moaning and puffing. I said, 'What'd you do?'"

The man on the ground gasped, "I read that running is good for me, and I came down here and sprinted a couple of 220s. Now I'm like this."

"No wonder," Lydiard scolded. "You're lucky you didn't kill yourself." He told the man, "Come down here every night. Don't run fast. Just trot around nice and easy. I'll tell you when you can run fast.

Weeks later, Lydiard met the man again, and said "Now go and see how many 220s you can run. He did eight, 10, no problem at all. He had adapted. By working easier—within his capacity—he had gotten where he wanted to go in the first place, but couldn't.

Faulty methods and/or faulty application of them is the main breaker of fragile running careers. Another related one is competition, real or imagined. Avoid competition as if it were a contagious disease. At this early stage, racing others or racing yourself can only hurt the body and spirit. Avoid any factor in early running which puts a sense of urgency, hurry and worry into the routine, or which forces comparison with unrealistic standards.

Dr. Meyer Friedman has identified the personality type least likely to succeed, and most likely to run into trouble. This is the hard-working, ambitious/driven man.

"This particular personality is a very peculiar one," Friedman says. "It's extremely competitive and it really is hung up on the 'numbers racket.' Such individuals, if they do take up jogging, usually don't go for long distance running but allocate a few minutes to it. They have a miserable tendency to run the same distance daily, with the intent of increasing their speed."

Turn off the stopwatch. Run gently, and to the beat of your own rhythms.

Chapter Three

Continuing



STAN PANTOVIC PHOTO

BEYOND THE MINIMUM

“Running is a total experience, that which some of us do best just as others find their satisfactions and fulfillment in skiing, mountain climbing, bicycling, snorkeling, pitching, or what have you. The experience is one that proceeds from one level to another. It can be merely physical fitness, or distraction, or religion. For some, sport is not a test but a therapy, not a trial but a reward, not a question but an answer.”

—George Sheehan, M.D.

Getting fit is not an end but a beginning. It opens doors to the total running experience. You’ve had your basic training, your tuneup. You can stay where you are now, and maintain near-maximum health and fitness with minimum time and effort. The maintenance program requires little more than an hour a week.

Health maintenance is a worthy goal. You never have to go beyond that. If you’ve gotten to the point where running is easy and habitual, and you feel good doing it, you’ve already come a long way. There’s no physical reason for going farther. Exercise experts assure you that anything beyond 10-15 minutes a day, four-five days a week gives diminishing returns. And that anything faster than your own best aerobic pace can do you more harm than good.

But the open door is there, and many runners are going to want to go through and explore the other side. They feel they must go beyond minimum standards, exploring both the internal and external environments. The act of exploring adds new dimensions to the total experience.

On the simplest level, running longer lets you cover more ground, and see it from a new perspective. Getting more involved means learning more about the sport. And pushing harder means finding the limits of yourself. With basic training behind you, you have the background now to do these things.

Running has three dimensions, and the total experience is incomplete without any of them. The first dimension is solitary running. This is by yourself, with emphasis on concentrated thinking and looking. The second is social running, with other runners, with emphasis on talking. The final dimension is speed running. Here you turn inside yourself and run to your limits.

The word “race” scares some newcomers. They have in mind big-time, high pressure competition. They feel this kind of thing isn’t for them, figuring, “I’ll look bad,” or something like that.

Don’t worry about it. If you want to race, there’s a place for you. Open road/cross-country events are booming in the United States. These events welcome every shade of runner, all ages, both sexes. Ability is not an entry qualification. At these events, you can find your own level of competition, and you won’t be embarrassed by it.

Realize, though, that racing is all-out effort, and it hurts. Go into it well fortified with mileage. Even then, you may experience pains as severe as those in basic training. But there’s a difference. Once the pain came with trying to go a slow mile; the only alternative was rest. Now the pain comes from running top speed for an extended distance; the cure is several days of easy running. “Easy” means what? Two, three miles? This is satisfying progress.

OPPORTUNITY UNLIMITED

Running? A lonely sport? It can be that, but it doesn't have to be that. It may start out lonely, but it needn't stay that way. Company is available to anyone who wants it.

Each May, between 2000 and 3000 runners stream across San Francisco in a fantastic show of running strength and togetherness. The course is about eight miles on the road. The cast includes everyone from Olympic caliber distance racers to recently graduated beginners. There are no restrictions as to age, sex, or ability.

This is the biggest of the US road races. But they are booming throughout the country. The reason they're growing so fast is the open-door policy. Everyone is welcome. New recruits are actively sought. The atmosphere is friendly and informal—more like a roving family picnic than an athletic event. Emphasis is on participation and individual time rather than on winning.

The running habit has a way of escalating. With increases in distance and pace often comes an urge to do something more challenging. Road runs are a good place to start. US runners have them available in almost every area of the country, sponsored by the local Amateur Athletic Union or Road Runners Club.

While the US opportunities tend to be on the roads, the Europeans like to have their mass races on cross-country (natural terrain) courses. The Germans have a *Volkslauf* program, open to all. (The German word means "people's run"). The French have an annual cross-country event that draws more than 10,000 participants. In Britain, cross-country running is almost a national sport, and it has many of the same characteristics as US road racing.

Obviously there is an exciting intermediate step between running alone and racing in high-level competition. Opportunities in the "people's runs" are growing. The escalation can progress beyond this stage, however. A researcher at Purdue University ran psychological tests on middle-aged men as they went through a conditioning program. The conclusion:

"The more fit the man, the more extroverted he tends to be. The individual tends to be insecure at first (as he begins the exercise program), then very anxious. After a while, he wants to compete, then he wants to beat someone and beat him badly. Finally, he punishes himself to see just how well he can do, how much he can take."

Willis Kleinsasser, president of the Seniors Track Club in southern California, has noticed such a trend among members of his club—most of whom are over age 40.

"With progress comes problems," Kleinsasser writes in the club's newsletter. "It is exhilarating to see new records set, tired misconceptions erased. At the same time one wonders what this does to Mr. Average. It used to be completing a marathon was a fulfillment of a wild dream. Now it seems necessary to run it in a 'respectable' time. In shorter races, the speeds can terrify.

"Obviously a continuing reminder of some of the slogans that have made the Seniors Track Club so successful is necessary. Remember these? 'Run, run, run.' 'Train, don't strain.' 'Running for fitness and fun.' None of those requires a stopwatch."

OPENING A NEW WORLD

BY JOHN BUTTERFIELD

John Butterfield was almost 33 years old when he started—apparently for the same, simple reasons other 33-year-olds begin running. Though active physically, he wasn't satisfied with the weight he was carrying. He wanted to lose it and saw running as the quickest way. He began with one eight-minute mile.

In July 1972, Butterfield raced in the US Olympic marathon trial. In just 2½ years, he had come this far. He had lost 25-30 pounds, and instead of doing a single mile in eight minutes he was putting 26 of them back-to-back—at about 5½ minutes apiece.

Not only is the Navy commander running marathons, but so is his wife. And his three children are working in that direction. John traces his and his family's amazing progress, and describes the new world running has opened to them. He emphasizes that running marathons and making the Olympic trials isn't a necessary part of the experience—only a nice bonus. His experience is more typical than unique among road runners.

“Run? Race? Cross-country? Marathon? More than once? You've got to be crazy, man. Not me! I've got better things to do.”

“Like what?” would be my immediate response to that statement today. However, less than 2½ years ago I would have rattled off a series of negative thoughts about running. I never considered running for sport—fun or fitness. I wasn't against exercise; don't get me wrong. I thought I'd always been in fair shape, and I delighted in noontime basketball games, skiing, tennis occasionally, and was learning (and liking) handball and paddleball. But running for its own sake never entered my mind.

In late January 1970, I had just returned from a tour of duty in Vietnam and was attending the Armed Forces Staff College at Norfolk, Va. I realized that the war hadn't really toughened me up; 165 pounds was a bit much for a 5'8" frame. I needed to slim down and get regular, vigorous exercise. And there it was—a ready-made program at the college, patterned after Kenneth Cooper's “aerobics.” Jogging was the guts of it.

So off I went—jogging miles around the college, gradually going down in pace for my mile runs. I never ran more than four miles at a time those first several months. However, I did work up to what I now know are “double” (twice-a-day) workouts—or sometimes triple. I can't really say this running was great fun. But I knew it was good for me as I lost 25 pounds and felt better. The running was gradually becoming easier and more natural. I enjoyed the sense of improvement. And it helped my tennis game.

Another big plus: Seeing me running so much got my wife Priscilla started jogging. Those first one-mile jogs were particularly difficult for her, but she stuck with it. After a full year of that routine, she got to the point where her run was fun and she looked forward to it every day. She began to pick up her daily dose to about two miles by late fall 1970.

Meanwhile, we had moved on to Tacoma, Wash., and I had worked up to 6-8-mile jaunts. I was enjoying running more, largely due to the scenery

and the open spaces here. Also, Priscilla's enjoying it more helped me, too. There's nothing like togetherness. And she was taking to tennis then, so we could share even more.

Next step: I was to pilot an aircraft one Saturday to Colorado, but the flight was cancelled at the last minute. With nothing better to do, I picked up a newspaper—which I rarely read—and saw a little squib on the sport page saying, "All those intered in a 6.6-mile cross-country race..." I mentioned it to Pris and she encouraged me to have a look. I thought it might be fun to test myself since I had been running for a few months and had gone as far as eight miles non-stop.

With my tennis sneakers, bermudas and an old tee-shirt, I was off for my first race. I huffed and puffed a good bit over the combination road-trail course, and gasped over the finish line in fourth place. I loved it. The sense of accomplishment was amazing. I had done better than I ever imagined I could, and forgot the drained feeling five minutes later.

"Sure," I said, "I'll come to more of your bi-weekly club runs and give 'em a go." It didn't take any urging.

Carl Glatze, who got the little Tacoma group going and set up these fun-runs, was a real inspiration to me. But he scared me when, after a couple more runs, he mentioned the possibility of going down to Oregon for a marathon. When I pinned him down on the exact distance, I knew I would make sure to be busy that weekend. No way could I run 26.2 miles! Eight miles is long enough, ever, I thought.

But then a sudden shift of duty back to the east coast altered my perspective. I had heard of the Boston marathon since I was a kid. Curiosity got the better of me, and I thought I might see what the BAA marathon was all about. I was out every day trying to increase my mileage, and was running longer road races in New England. My first long race was a 16-miler, which qualified me for the 1971 Boston thing.

Well, as Boston approached and I talked and thought about little but running, Priscilla wondered if I had forsaken all else. She too had upped her mileage—to four miles a day quite often—but she thought I was a nervous Nellie, afraid to lift garbage cans for fear of hurting my back. My mind was on packing in those miles, and I didn't want anything slowing me down.

Boston came and went, and we all were happy, excited and on a "high." I had finished the run; that had been my first goal. My fast time and good placing were complete surprises. The best part of the whole experience was that it really turned on my wife to running: the crowds, the excitement, the fun of it all.

A week later, unbeknownst to her, I signed Priscilla up for a four-mile race. She fought the idea very little. That race did it. She was hooked. She loved it and then—only then—really knew why I was so wrapped up in running.

Getting to know the New England running crowd was great. It added immensely to the joy of running. (That's got to be one of the driving reasons which keep many people running and racing: the marvelous folks one meets on the circuit.) But just as we were getting into the New England scene, the Navy had new plans for me. In August 1971, I was transferred to Napa, Calif.

The west turned out to be at least as terrific for a runner. Now we hate

the thought of ever leaving here. The running scene is beautiful, the folks are the friendliest and the races are outasight.

Here's how we plunged into racing in the west. I ran the race called the Dipsea, which goes over a mountain between the San Francisco Bay and the Pacific Ocean. Never did I dream there'd be 1400 starters. But there we were. We went off, up the steps, over the meadows and narrow, steep paths designed for goats—not racers. The Dipsea was an experience!

Pris scared herself half to death driving the twist and turn road from one end of the race to the other. That drive convinced her it would be easier to run it in the future. She was impressed too with the crowd, the enthusiasm, and the scads of people of every age and description. Back east, she was one of a handful of female runners. After the Dipsea, our daughter Wendy remarked very soberly, "Hey, Mom. You won't be famous out here."

However, I might mention here that Pris took satisfaction in pointing out to me that her name appeared in *Racing Report* issues long before mine did. Oh well, more incentive to work harder and get my name in print—if that's what running is all about (which it definitely is not!).

Other status symbols, far more meaningful: Losing your first toenail (Pris came screaming with delight when that magic moment occurred). Your maiden pitstop during a race (not to find a maiden, but for the pause that truly refreshes). Joining the talk among runners which usually focuses on aches and pains, home cures and remedies, training schedules and mileage, diet and food fetishes. And the "why I didn't do as well today as I should have" but "where's the next race when I'll put it all together" bit.

I could go on and on about running and the joy it has brought us—individually and collectively. As a family, we have something we can share, and that we enjoy sharing.

Molly, our 5-year-old, has not progressed past the mile mark, while Wendy (12) and Andrew (9) have raced 10-milers. We have not pressured the kids into a rigid running regimen. We have kept it low-key and on a fun basis. A couple of training runs a week are encouraged, but nothing too long, frequent, or strenuous.

Priscilla now runs six miles every day, and sneaks in an occasional longer one, 10 or 12 miles. She finished her first marathon in just over four hours. She is tempted to try a bit heavier training program in an effort to get under that time.

Within two years of my starting date, I got to where I could go upwards of 125 miles a week prior to an important race like the Boston Marathon or Olympic trials. But more miles than that brings me little in return. Most of my running is at a steady, comfortable pace. I have shied away from hard speed training, since I'll never be a speed merchant at my age anyway. I think it might bring more risk of injury, and force a layoff which I dread greatly.

I love the running, day in and day out, racing almost weekly, and the whole fun scene. I'm thankful that I—and of course my whole family too—found running. Maybe it's just as well I never ran before—as a trackster, cross-country man or even jogger—because it's still new and exciting and has added extra dimensions to life.

I know it's not just a fad found late in life for me. I never intend to stop—not now or ever. I only hope more people can discover the fun, fitness and beauty of getting out on the run, as I have. It's a whole new world.

BEGINNING RUNNING

There is an “understanding gap” in running. Beginners in the sport can’t understand and appreciate what it means to be a fit runner. And runners who are deeply into it have an equally hard time remembering what it felt like to be a beginner. This booklet bridges the gap between the two—helping beginners become fit runners, and helping fit runners guide beginners.

The two purposes are equally important, because beginners need practical advice to get them through the first difficult, sometimes painful steps. And runners who have been through these steps are best able to give this advice.

An embryonic running career is a fragile thing, and unrelenting pain can shatter the best intentions—unless the beginner has firmly in mind that his experiences are normal, and that better ones lie ahead.

After touching lightly on the reasons to start running, *Beginning Running* concentrates on the area between the first halting step and the point where beginners are sufficiently hooked to call themselves fit runners.

The advice here centers on how to get through the hardest part as safely and painless as can be expected, so the real running can start once basic fitness is established.

The booklet describes a variety of preliminary conditioning methods—all beginner-tested and found effective—and spells out the expected sequence of development and how to measure it. For all the hardships of starting, it can be an exciting time. Never again will body changes come so quickly or be so profound.

32 pages, \$1.00

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