

## 4. Prescription for the beginner

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If a little is good, is more better and is the limit best? Certainly not, especially in the area of exercise!

Since the people of the United States and the world have taken to the streets, many have tried to increase their running mileage to 100 to 150 miles per week. I have two quick rebuttals to the 100 miles per week theories of training. First, I have never coached a really successful runner whose regular training included more than 70 miles per week, and this includes 17 sub-4-minute milers, 5 champion 3-milers, and 2 world-class marathoners. Second, among those who insisted on training with longer distances there were no champions and a high proportion of physical breakdowns. I coached one 4:00.2-minute miler who could never run more than 25 miles per week without suffering some minor or major physical disability but who maintained his maximum health and fitness on the 25 miles per week program.

Training *principles* are the same for people of all ages and expectations. Training *practices* (such as fartlek, intervals, and steady-state running) are flexible, their amounts and frequency varying according to the ability and goals of each individual.

### TRAINING SCHEDULE

My method of devising a training schedule (specific assignments for workouts) is not very different from a physician's method of arriving at a prescription for a patient. The first step is diagnosis, becoming acquainted with the patient's or athlete's abilities and disabilities. The second step is an assessment of what improvement can reasonably be expected and what specific recommendations are needed. The final step is a period of trial and observation to adjust the "dosage" or training schedule to optimum levels for the safest and most rapid improvement of condition.

Beginners, particularly unfit middle-aged adults of sedentary habits or individuals seeking rehabilitation after illness or injury, should have a thorough examination by a qualified physician to find out if there are any special limitations on activity.

If there are no outwardly imposed limitations, a test is given to determine the individual's level of ability. The results of the test establish a time for covering certain distances in the training routines for the next few weeks. At the end of that

time another test indicates readiness for increasing distance and decreasing time (adding more stress) in subsequent workouts.

When Dr. Waldo Harris, a Eugene, Oregon, cardiologist and internist, and I performed our original experiments with mixed groups of adult joggers, we began with 2 weeks of easy conditioning before the first test efforts. This period allowed the joggers to recover from minor stiffness and develop self-confidence and an understanding of what they should expect to accomplish. This also allowed us to observe the joggers and divide them into three ability classifications to prevent undue competitiveness or discouragement.

After the initial 2 weeks' conditioning, our joggers began exactly as the runners I train do at the beginning of each new season, with a test to see if they could cover 880 yards ( $\frac{1}{2}$  mile) without strain. When working with runners, I suggest that they go through the test at three-fourths maximum effort. With beginners, who would probably be unable to judge what this means, I explain,

Make two complete circuits of the track, which will be  $\frac{1}{2}$  mile, at a pace well within your tolerance. Whenever you feel your pace is too fast, slow down or even walk. When comfortable, resume a quicker pace. You will be timed for the half mile. One eighth of your total time, or the average time you took to cover 110 yards, will be your training pace, the basis for your assignments for the next 2 weeks.

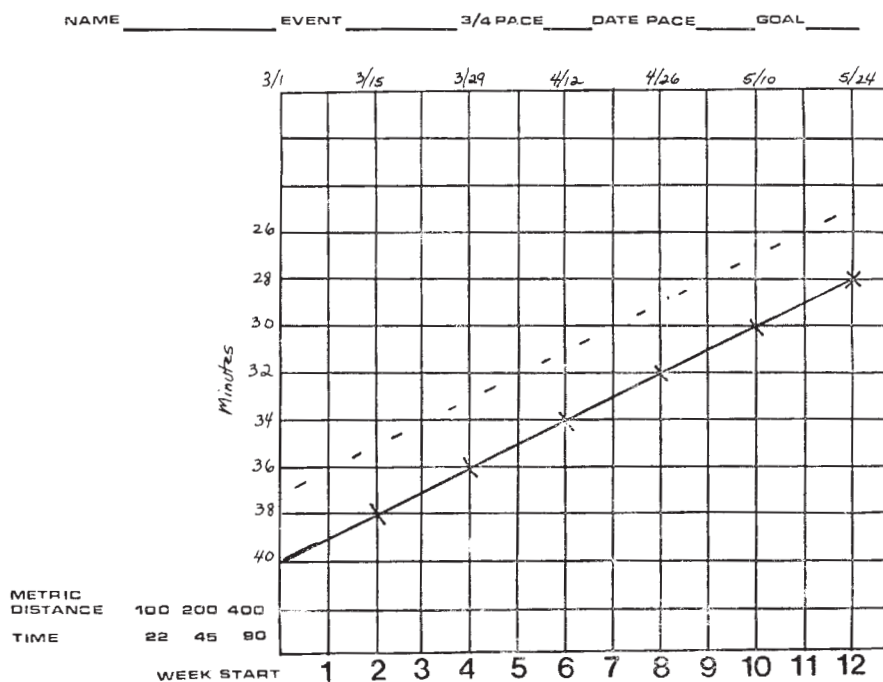


Fig. 4-1

When I am working with only one person, I do the timing myself. When working with a group, as we did in the jogging study, I ask the group to count off by two's to establish partners. When the "one's" are running, the "two's" listen to the official timer who calls out the times as joggers finish their two laps. Each "two" is responsible for recording and reporting his partner's finish time. Likewise, when the "two's" run, their partners record and report their times.

After a runner or jogger has ascertained his training or *date pace*, it is entered on a graph as the first X in the lower left corner (Fig. 4-1). In the upper right corner another X is placed to indicate the *goal pace*, which represents the time in which an individual (or his coach, trainer, physician, or adviser) believes he will be able to run the same distance 3 months later. The numbers running upward on the left margin of the graph start with the date pace and progress to the goal pace at the top of the column. The numbers across the top of the graph are the dates at 2-week intervals for the following 3 months. On each of these dates another test effort will be run. A diagonal line drawn from the date pace at the bottom left to the last date at the upper right indicates the jogger's expected rate of progress. Lines drawn across the graph from the pace numbers intersect the progress line and the perpendicular lines from the various dates to show the pace at which the jogger should expect to cover 110 yards of another 880-yard run on each testing date.

This kind of chart provides the runner and his adviser with a simple way to assess progress and to adjust the training schedule as necessary.

#### SETS OF EXERCISE

The most important question is: How does the runner or jogger get from the first X on the chart to the final X? The answer: By practicing a regularly repeated but varied set of exercises, which should be written out in advance in accordance with a master plan on a schedule.

On this schedule every other day should consist of light exercise, not more than 20 minutes of easy jogging, swimming, weight-lifting, walking, bicycling, or whatever is pleasurable. Serious or "hard" workouts take place on the alternate days. Even these hard workouts, however, should adhere to the maxim "Train, don't strain."<sup>2</sup>

Serious workouts generally consist of intervals, fartlek, steady-state running, or a combination of these with appropriate variations.

Interval work is running or jogging comparatively short distances, which are repeated a specified number of times with appropriate rest intervals of walking or easy jogging. A beginner should probably start with intervals of about 55 yards, repeated not more than four times at his date pace with whatever rest he needs in between to recover normal breathing and pulse rate. Over a 3-month period most beginners work up to intervals of 220 yards or even 440 yards (once around a quarter-mile track), repeated as many as six times. Those who are young, comparatively fit, and well acquainted with their own tolerance for exercise and stress will probably be able to take on more than this moderate schedule.

Fartlek is a Scandinavian word meaning speed play. Fartlek is assigned by the length of time it is to be practiced rather than by a distance to be covered. During 20 to 45 minutes of fartlek a runner may include any or all elements of a race, increasing or decreasing his speed whenever he wishes and adding, if he likes, special exercises such as jumping, skipping, short sprint bursts, or anything that expresses or adds to his joy in the activity.

A steady-state run means running a specified distance or length of time at a fairly even, comfortable pace. One of the objects of steady-state running is to increase the distance that can be covered smoothly and easily. The gradual increase in distance covered each week over 6 weeks or more builds strength, stamina, and self-confidence.

The schedules I make out for those I am advising generally include 1 day of each of these types of exercise on the 3 "hard" workout days of each week.

A typical schedule for a beginning jogger or rehabilitation patient who has completed at least 2 to 3 weeks of conditioning might look like this<sup>1</sup>:

MONDAY: Cover total distance of 1½ miles as follows:

1. Jog 110 yards, walk 110 yards.
2. Jog 220 yards, walk 220 yards.
3. Jog 110 yards, walk 110 yards.
4. Jog continuously but at varied pace (fartlek) for ¾ mile, including walking as needed.
5. Jog 110 yards, walk 110 yards.

TUESDAY: Walk 5 to 10 minutes; do easy stretching exercises.

WEDNESDAY: Cover total distance of 1½ miles as follows: Jog continuously for 1½ miles at as even a pace as possible, but slow to a walk occasionally if needed. The purpose of this exercise is to find the pace at which an individual can cover the distance at a steady-state run or jog and to develop the physical condition to do it easily. Improvement should be gradual.

THURSDAY: Walk 5 to 10 minutes; do easy stretching exercises.

FRIDAY: Cover total distance of 1½ miles as follows:

1. Jog 110 yards, walk 110 yards.
2. Jog 330 yards, walk 330 yards.
3. Jog slowly and steadily 880 yards. Walk as needed.
4. Jog 110 yards, walk 110 yards; repeat three times.

SATURDAY OR SUNDAY: Either walk 10 to 15 minutes or do stretching exercises, but not both.

#### REFERENCES

1. Bowerman, W.J., and Harris, W.E.: *Jogging*, New York, 1967, Grosset & Dunlap, Inc.
2. Lydiard, A.: *Run to the top*, Wellington, New Zealand, 1962, A.H. Reed & A.W. Reed, Ltd., Publishers.