

NEW! WORLD'S FASTEST SELLING EXERCISE BOOK

**U.S. OFFICIAL
PHYSICAL
FITNESS
PROGRAM**



**A fitness program for all that
takes only a few minutes a day**

PREPARED BY
THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS
DIRECTED BY **BUD WILKINSON**



PRESIDENTIAL MESSAGE

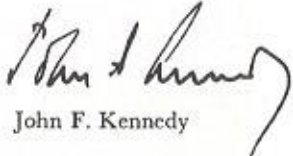
Ours is not a regimented society where men are forced to live their lives in the interest of the state. We are, all of us, as free to direct the activities of our bodies as we are to pursue the objects of our thought. But if we are to retain this freedom, for ourselves and for generations yet to come, then we must be willing to work for those physical qualities upon which the courage and intelligence and skill of man so largely depend.

In the past, on many occasions, I have stressed the importance of vigorous physical activity for our children. I have asked parents to support physical fitness programs in their schools and to provide additional opportunities for developing strength and stamina in their homes and in their communities. We must do still more.

We must illustrate by deed and example, as well as by words, the importance of physical vitality and health. We must live our lives in such a way that our children, and their children after them, will form a natural and lasting commitment to the vigorous life. Only in this way can we be assured that the spirit and strength of America will be constantly replenished.

This booklet contains the recommendations of my Council for improving the physical fitness of adults. I urge each of you to follow these recommendations—to have frequent medical checkups, to get sufficient rest and nourishment and, above all, to exercise regularly and vigorously.

The need for increased attention to physical fitness is clearly established. The Government cannot compel us to act, but freedom demands it. A nation is merely the sum of all its citizens, and its strength, energy and resourcefulness can be no greater than theirs.


John F. Kennedy



INTRODUCTION

If you have decided that it is time to get in shape, you have a rewarding adventure ahead.

The two programs in this booklet—one for women, one for men—are designed to help you condition yourself and achieve physical fitness on a sound, progressive basis.

Each incorporates principles which, research has shown, can help you increase your strength, stamina and flexibility; look, feel and work better; enjoy life more zestfully, and—very probably—enjoy it longer.

Like millions of adult Americans who today recognize the desirability of physical fitness and would earnestly like to achieve it, you probably have wondered what to do, how to begin, how far to go—and, not least of all, whether you can spare the time, whether fitness is something that can be achieved by busy people with little time to spare.

The programs are designed so that:

You will know exactly how and where to begin—and what to do every step of the way.

You will begin easily—without strain or upset—no matter how long since you engaged in vigorous physical activity.

You will make steady progress toward a level of fitness that you will be able to determine is most suitable for you—and that you will be able to maintain.

You will have the satisfaction of being able to measure your progress as you proceed.

You will be able to proceed at home—without special equipment—and at a convenient time.

And the time required will not be excessive.

Physical fitness can be achieved at any age. You do not achieve it overnight. It does take effort. But the resulting feelings of well-being, renewed strength and vitality are well worth the effort—and you can start on your way right now.

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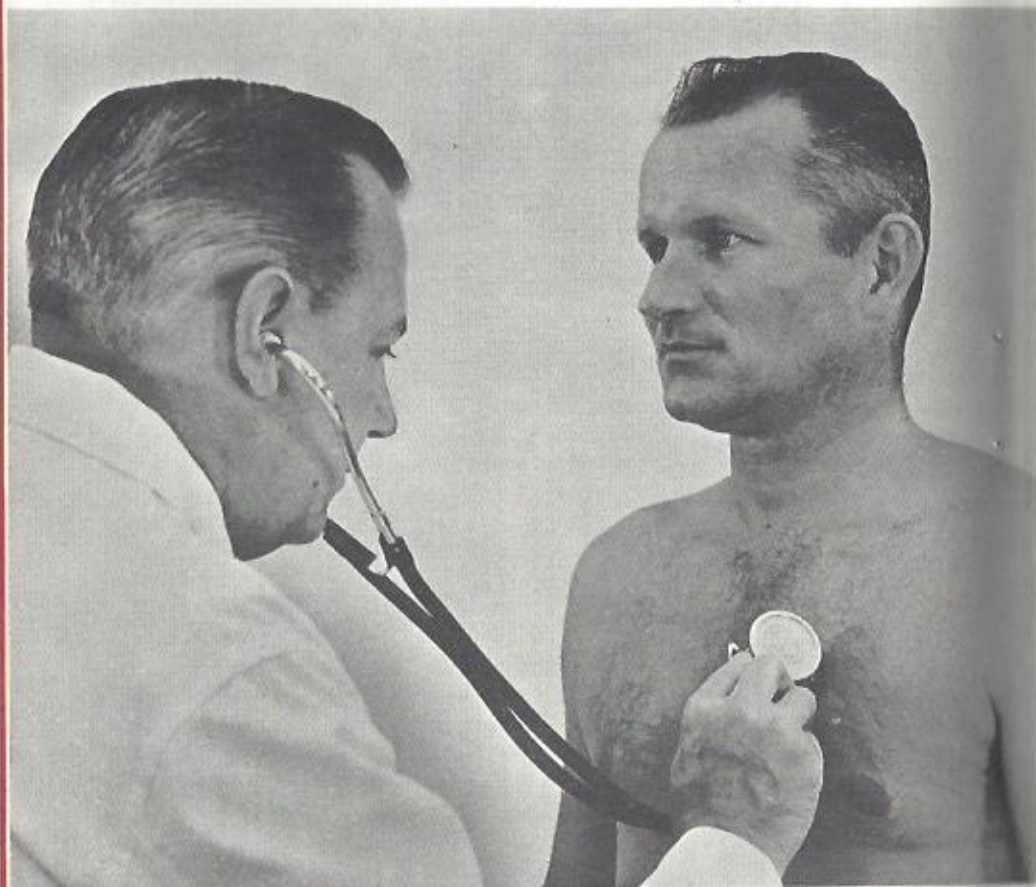
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SPECIFIC FACTS YOU'LL WANT TO KNOW ABOUT PHYSICAL FITNESS



What it is

In a technical sense, physical fitness can be viewed as a measure of the body's strength, stamina and flexibility. In more meaningful personal terms, it is a reflection of your ability to work with vigor and pleasure, without undue fatigue, with energy left for enjoying hobbies and recreational activities, and for meeting unforeseen emergencies. It relates to how you look and how you feel—and, because the body is not a compartment separate from the mind, it relates to how you feel mentally as well as physically.

Physical fitness is many-faceted. Basic to it are proper nutrition, adequate rest and relaxation, good health practices, and good medical and dental care.

But these are not enough. An essential element is physical activity—exercise for a body that needs it.

Why exercise?

Wherever there is muscle there is need of movement.

The human body contains more than 600 muscles; overall, it is more than half muscle.

Muscles make possible every overt motion. They also push food along the digestive tract, suck air into the lungs, tighten blood vessels to raise blood pressure when you need more pressure to meet an emergency. The heart itself is a muscular pump.

Technological advances have changed our way of living, have made strenuous physical exertion largely unnecessary. The word "chore" has virtually gone out of use.

But the needs of the human body have not changed. Muscles are meant to be used. When they are not used, or not used enough, they deteriorate. If we are habitually inactive—if we succumb to the philosophy of easy living—we must then pay the price in decreased efficiency.

Research support for regular physical activity as an essential for healthful and vigorous living is increasing constantly.

That we are, to a great degree, what our muscles make us—weak or strong, vigorous or lethargic—is a growing conviction among medical men.

Offering strong support for this conviction is the following observation by a former president of the American Medical Association: "It begins to appear that exercise is the master conditioner for the healthy and the major therapy for the ill."

A 1962 survey of a cross section of physicians—nearly 4,000—showed that almost all now believe strongly that positive health benefits, both physical and mental, accompany physical fitness resulting from regular, moderate exercise. It also revealed that the great majority have come to

favor the inclusion of tests of physical fitness in periodic health examinations—and are convinced that physical fitness programs, which have been largely aimed at children, are even more necessary for adults.

Some specific benefits

An obvious effect of regular exercise is the firming of flabby muscles. In addition, research indicates that exercise produces beneficial changes in the functioning of internal organs—especially the heart, lungs and circulatory system. The heart beat becomes stronger and steadier, breathing becomes deeper and circulation improves.

Research lists these benefits experienced by people who, after a prolonged period of sedentary living, undertake a systematic conditioning program:

- Increased strength, endurance and coordination
- Increased joint flexibility
- Reduction of minor aches, pains, stiffness and soreness
- Correction of remediable postural defects
- Improvement in general appearance
- Increased efficiency with reduced expenditure of energy in performing both physical and mental tasks
- Improved ability to relax and to voluntarily reduce tension
- Reduction of chronic fatigue

Exercise and chronic fatigue

Ranking today as one of the most frequently voiced of all complaints, chronic tiredness can stem from illness. But in many people, investigators report, it is the result of gradual deterioration of the body for lack of enough vigorous physical activity.

Continual inactivity produces muscular atrophy and the individual soon becomes under-muscled for his weight. The result: he lacks the strength and endurance to do his daily work easily and efficiently.

One important end result of the increased muscular strength and general endurance provided by exercise is an increase in the body's capacity for carrying on normal daily activities, a pushing back of fatigue limits.

Valid research indicates that a fit person uses less energy for any given movement or effort than a flabby or weak person.

Exercise and the heart

An old-fashioned idea—that exercise may be bad for the heart—has been shown to be without scientific foundation. Not only that—it has been proven that appropriate exercise strengthens the heart.

A noted heart specialist recently commented: "The best insurance against coronary (heart) disease is exercise—lots of it."

Backing up this conviction is a growing body of evidence. It includes findings of lower cholesterol values in active people, faster clearing of fats from the blood after meals—and sharply reduced heart attack rates.

A recent study covering 120,000 American railroad employees revealed the heart attack incidence among sedentary office workers to be almost twice that of men working in the yards. Other studies—in the United States, England and elsewhere—also show a higher rate of heart attacks among the sedentary than among the physically active.

Additionally, the studies indicate that, when a heart attack does occur, the physically active person is more likely to recover. One possible reason: there is evidence that exercise may promote development of supplementary blood vessels which can take over the burden of nourishing the heart muscle when a coronary artery is blocked in a heart attack.

Exercise and aging

There is strong authoritative support for the concept that regular exercise can help prevent degenerative disease and slow down the physical deterioration that accompanies aging.

The evidence is conclusive: individuals who consistently engage in proper physical activity have better job performance records, fewer degenerative diseases, and probably a longer life expectancy than the population at large. By delaying the aging process, proper exercise also prolongs your active years.

A special note about weight

A common misconception is that exercise does not aid in weight control. This is not the case. Research shows:

That fat piles up in most people by only a few calories a day;

That an excess of only 100 calories a day can produce a 10-pound gain in a year—and that the extra calories could be burned up by a 15- to 20-minute daily walk;

That obese people almost invariably tend to be much less active than those of normal weight;

That individual weight, moreover, is a factor in energy expenditure. If you are overweight, you will burn up more calories in performing exercise than a person of normal weight.

According to studies by the Harvard School of Public Health, one-half hour of proper exercise each day can keep off or take off as much as 26 pounds a year.

Inactivity is the most important factor explaining the frequency of "creeping" overweight in modern Western society. And the consensus now among medical and health authorities is that the most effective way

to take off weight and keep it off is through a program which combines proper exercise and reasonable diet.

If you need to lose weight, do so under the direction of your physician. Don't lose more than two pounds per week without his knowledge and consent. Determine to reduce gradually and consistently. Determine to develop proper eating habits. A change in diet—perhaps a change as slight as taking a little less sugar or none in beverages—may be all that is necessary to bring your weight down and keep it down, especially if coupled with the essential exercise regimen.

If you're handicapped

Where there is impairment or illness, any and all exercise should be medically prescribed and regulated.

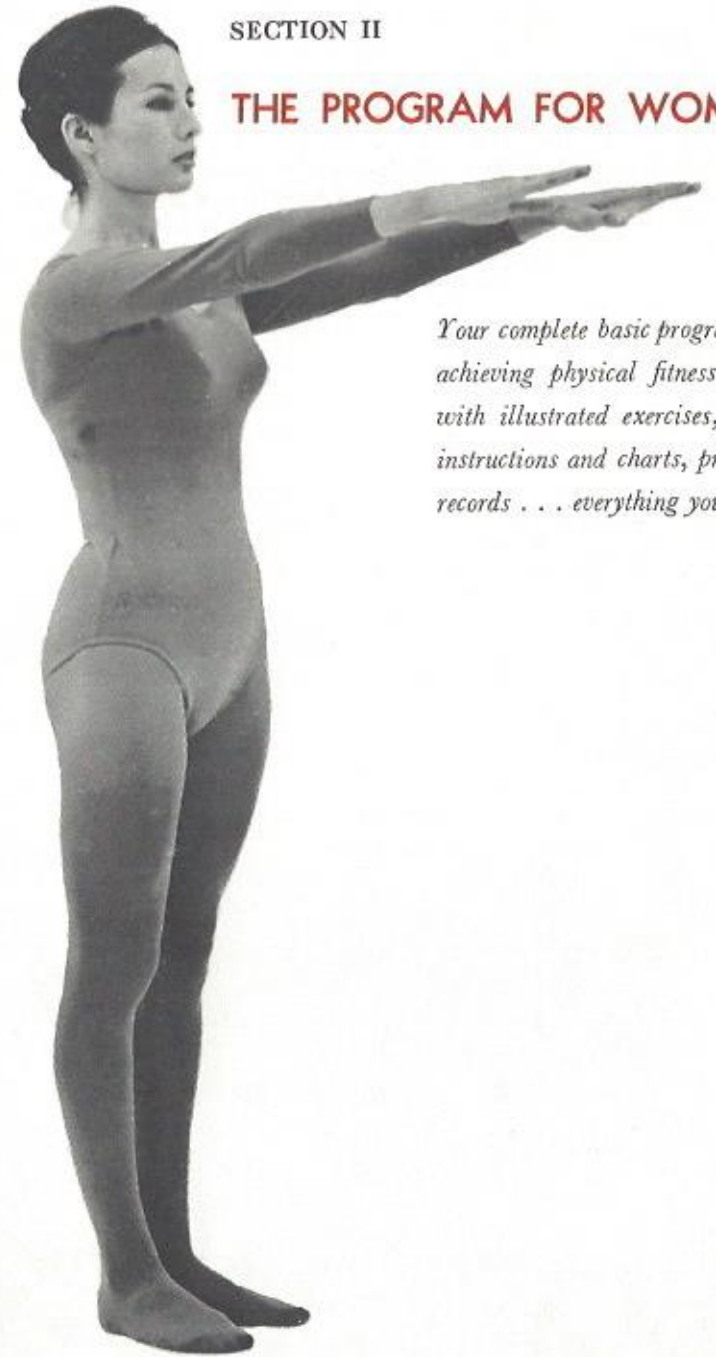
Today, physicians are using exercise as an aid in combatting many chronic problems, including arthritis, asthma, diabetes and emphysema. A common type of low back pain has been traced to weakened back muscles, and exercise has been used both to produce relief and to help prevent recurrences.

If you have a handicap, your doctor may find that some or many of the exercises given in this manual—perhaps with modifications—could be of value to you.



SECTION II

THE PROGRAM FOR WOMEN



Your complete basic program for achieving physical fitness . . . with illustrated exercises, clear instructions and charts, progress records . . . everything you need.

Before you begin

A medical examination at least once a year is generally advisable for every adult. It's an excellent idea to get such an examination now before beginning your conditioning program.

Very probably your physician will be able to recommend that you proceed without restriction. If he should find any physical problem, he can take steps to correct it—and may have suggestions for modifying the program to make it more suitable for you.

Once you have had an examination, you can proceed confidently.

A reassuring word about muscles

As you make use of the program in the following pages, you need have no fear of becoming heavily, unattractively muscled. On the contrary:



With disuse or little use, muscles tend to become less elastic, weaker, softer. They lose tone.

The exercises you will be working with are designed to firm your muscles, restore their tone, increase their strength and flexibility. Your appearance will improve as certain muscles—in the abdomen and back, for example—become able to provide better support. As others—in the arms, legs—become more responsive, every move you make is likely to be easier and more graceful.

About the program

It assumes that you have not been engaging recently in consistent, vigorous, all-round physical activity—even though, in housework or other daily routines, you have put some muscles to extensive use.

It starts with an orientation or “get-set” series of exercises that will allow you to bring all major muscles into use easily and painlessly.

There are then five graded levels.

As you move from one to the next, you will be building toward a practical and satisfying level of fitness.

By building gradually, progressively, you will be building soundly.

What the exercises are for

There are three general types—warmup exercises, conditioning exercises and circulatory activities.

The warmup exercises stretch and limber up the muscles and speed up the action of the heart and lungs, thus preparing the body for greater exertion and reducing the possibility of unnecessary strain.

The conditioning exercises are systematically planned to tone up abdominal, back, leg, arm and other major muscles.

The circulatory activities produce contractions of large muscle groups for relatively longer periods than the conditioning exercises—to stimulate and strengthen the circulatory and respiratory systems.

The plan calls for doing 10 mild exercises during the orientation period and, thereafter, the warmup exercises and the seven conditioning exercises listed for each level. The first six exercises of the orientation program are used as warmup exercises throughout the graded levels.

When it comes to the circulatory activities, you choose one each workout. Alternately running and walking . . . skipping rope . . . running in place. All are effective. You can choose running and walking on a pleasant day, one of the others for use indoors when the weather is inclement. You can switch about for variety.

How you progress

A sound physical conditioning program should take into account your individual tolerance—your ability to execute a series of activities without

undue discomfort or fatigue. It should provide for developing your tolerance by increasing the work load so you gradually become able to achieve more and more with less and less fatigue and with increasingly rapid recovery.

As you move from level to level, some exercises will be modified so they call for increased effort.

Others will remain the same but you will build more strength and stamina by increasing the number of repetitions.

You will be increasing your fitness another way as well.

At level 1, your objective will be to gradually reduce, from workout to workout, the "breathing spells" between exercises until you can do the seven conditioning exercises without resting. You will proceed in the same fashion with the more difficult exercises and increased repetitions at succeeding levels.

You will find the program designed—the progression carefully planned—to make this feasible. You will be able to proceed at your own pace, competing with yourself rather than with anyone else—and this is of great importance for sound conditioning.

Note: Gradually speeding up, from workout to workout, the rate at which you do each exercise will provide greater stimulation for the circulatory and respiratory systems and also help to keep your workouts short. However, the seven conditioning exercises should not be a race against time. Perform each exercise correctly to insure maximum benefit.

Choosing your goal

There is no need to pick the level to which you want to go—now.

Many women will be able to advance through the first three levels. While the fourth is challenging, some women will be able to achieve it. The fifth is one which only extremely vigorous, well-conditioned women will reach.

The level of fitness you can reach depends upon your age, your body's built-in potential capacity and previous conditioning. It also depends upon your state of mind; as you know, when you want to do something and believe you can, it is much easier to do than otherwise.

While there will be no dramatic overnight changes, gradually over the next weeks and months, as you progress through the first levels, you will begin to notice a new spring in your step, a new ease with which you accomplish your ordinary daily activities. You will find yourself with more energy left at the end of the working day and a new zest for recreation in the evening. Quite likely, you will be sleeping more soundly than you have slept for many years and waking more refreshed in the morning.

After completing the early levels, you may come to realize that you can—and want to—go further. Go as far as you can.

The important point is that, no matter what level you choose, you will greatly improve your physical fitness and you will be able to maintain the improvement and continue to enjoy the benefits.

When and how often to work out

To be most beneficial, exercise should become part of your daily routine—as much so as bathing, dressing.

Five workouts a week are called for throughout the program.

You can choose any time that's convenient. Preferably, it should be the same time every day—but it doesn't matter whether it's upon arising, at some point during the morning or afternoon, or in the evening.

How long at each level

Your objective at each level will be to reach the point where you can do all the exercises called for, for the number of times indicated, without resting between exercises.

But, start slowly.

It cannot be emphasized enough that by moving forward gradually you will be moving forward solidly, avoiding sudden strains and excesses that could make you ache and hold you back for several days.

If you find yourself at first unable to complete any exercises—to do continuously all the repetitions called for—stop when you encounter difficulty. Rest briefly, then take up where you left off and complete the count. If you have difficulty at first, there will be less and less with succeeding workouts.

Stay at each level for at least three weeks. If you have not passed the prove-out test at the end of that time, continue at the same level until you do. The prove-out test calls for performing—in three consecutive workouts—the seven conditioning exercises without resting and satisfactorily fulfilling the requirement for one circulatory activity.

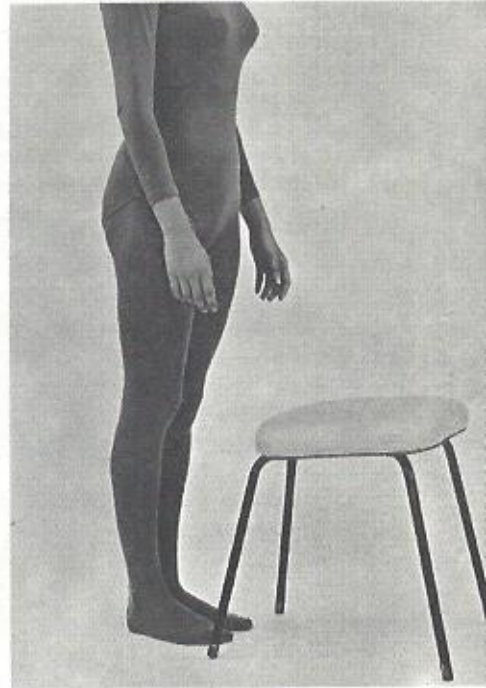
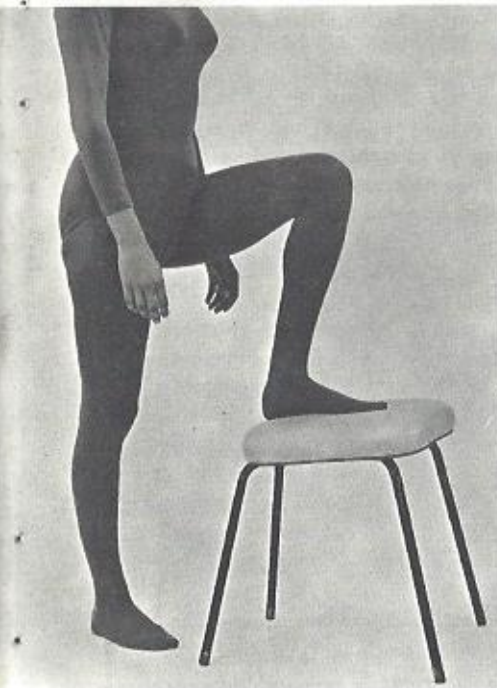
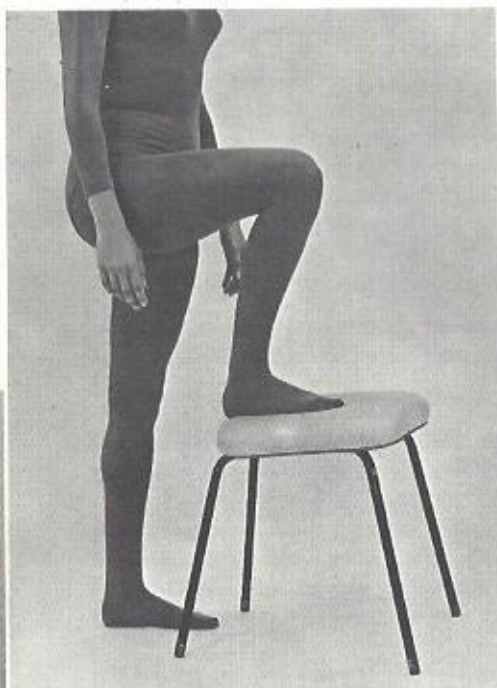
A measure of your progress

You will, of course, be able to observe the increase in your strength and stamina from week to week in many ways—including the increasing facility with which you do the exercises at a given level.

In addition, there is a 2-minute step test you can use to measure and keep a running record of the improvement in your circulatory efficiency, one of the most important of all aspects of fitness.

The immediate response of the cardiovascular system to exercise differs markedly between well-conditioned individuals and others. The test measures the response in terms of pulse rate taken shortly after a series of steps up and down onto a bench or chair.

Although it does not take long, it is necessarily vigorous. Stop if you become overly fatigued while taking it. You should not try it until you have completed the orientation period.



The test

Use any sturdy bench or chair 15–17 inches in height.

Count 1—Place right foot on bench.

Count 2—Bring left foot alongside of right and stand erect.

Count 3—Lower right foot to floor.

Count 4—Lower left foot to floor.

REPEAT the 4-count movement 30 times a minute for two minutes.

THEN sit down on bench or chair for two minutes.

FOLLOWING the 2-minute rest, take your pulse for 30 seconds.

Double the count to get the per-minute rate. (You can find the pulse by applying middle and index finger of one hand firmly to the inside of the wrist of the other hand, on the thumb side.)

Record your score for future comparisons. In succeeding tests—about once every two weeks—you probably will find your pulse rate becoming lower as your physical condition improves.

Three important points:

1. For best results, do not engage in physical activity for at least 10 minutes before taking the test. Take it at about the same time of day and always use the same bench or chair.

2. Remember that pulse rates vary among individuals. This is an individual test. What is important is not a comparison of your pulse rate with that of anybody else—but rather a record of how your own rate is reduced as your fitness increases.

3. As you progress, the rate at which your pulse is lowered should gradually level off. This is an indication that you are approaching peak fitness.

Your progress records

Charts are provided for the orientation program and for each of the five levels.

They list the exercises to be done and the goal for each exercise in terms of number of repetitions, distance, etc.

They also provide space in which to record your progress—(1) in completing the recommended 15 workouts at each level, (2) in accomplishing the three prove-out workouts before moving on to a succeeding level, and (3) in the results as you take the step test from time to time.

A sample chart and progress record for one of the five levels is shown below.

You do the warmup exercises and the conditioning exercises along with one circulatory activity for each workout.

Check off each workout as you complete it. The last three numbers are for the prove-out workouts, in which the seven conditioning exercises should be done without resting. Check them off as you accomplish them.

You are now ready to proceed to the next level.

As you take the step test—at about 2-week intervals—enter your pulse rate.

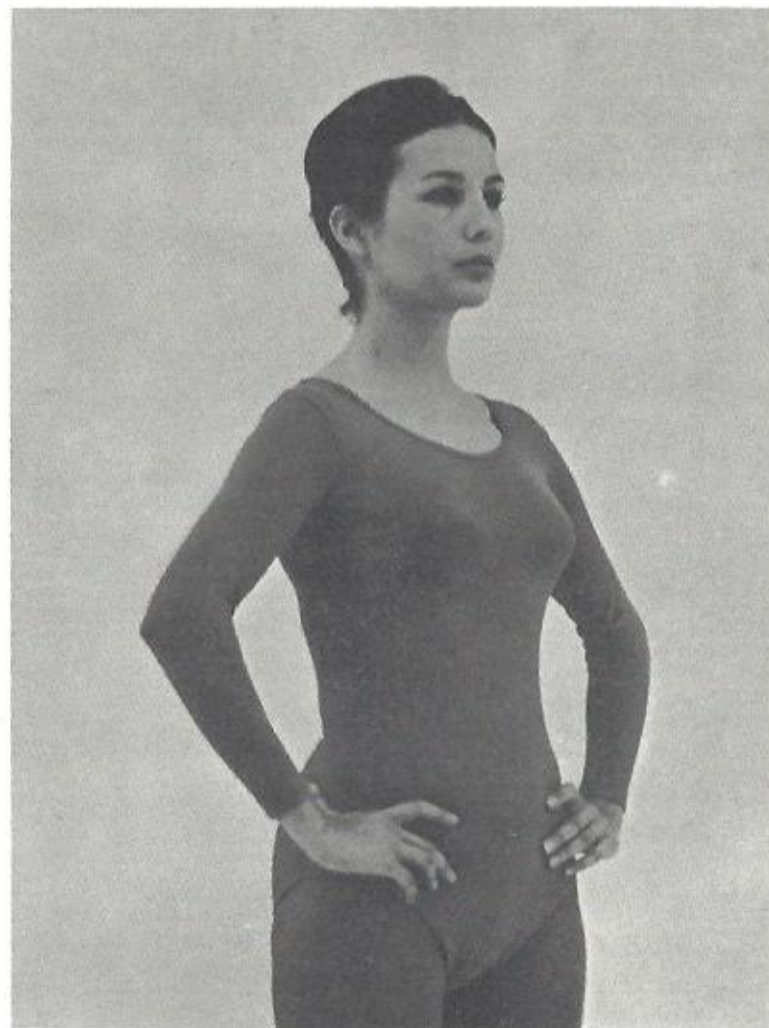
When you move on to the next level, transfer the last pulse rate from the preceding level. Enter it in the margin to the left of the new progress record and circle it so it will be convenient for continuing reference.

SAMPLE		GOAL
Warmup Exercises		Exercises 1-6 of Orientation program
Conditioning Exercises	Uninterrupted repetitions	
1. Bend and stretch.....	10	
2. Sprinter.....	6	
3. Sitting stretch.....	15	
4. Knee pushup.....	12	
5. Situp (fingers laced).....	10	
6. Leg raiser.....	10 each leg	
7. Flutter kick.....	30	
Circulatory activity (choose one each workout)		
Jog-walk (jog 50, walk 50).....	1/2 mile	
Rope (skip 30 secs.; rest 60 secs.).....	3 series	
Run in place (run 100, hop 25 - 2 cycles).....	3 minutes	
Water activities—See recommendations in Section IV.		
Your progress record	1 2 3 4 5 6 7 8 9 10 11 12	13 14 15
Step test (pulse)		Prove-out workouts

Getting set—orientation workouts

With the series of mild exercises listed in the chart on the next page and illustrated and described on the next two pages, you can get yourself ready—without severe aches or pains—for the progressive conditioning program.

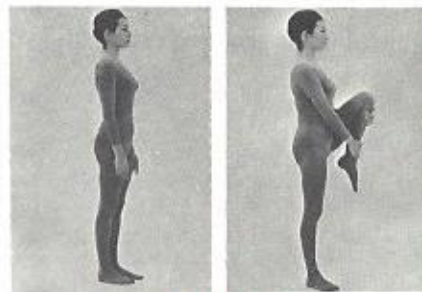
Plan to spend a minimum of one week for preliminary conditioning. Don't hesitate to spend two weeks or three if necessary for you to limber up enough to accomplish all the exercises easily and without undue fatigue.





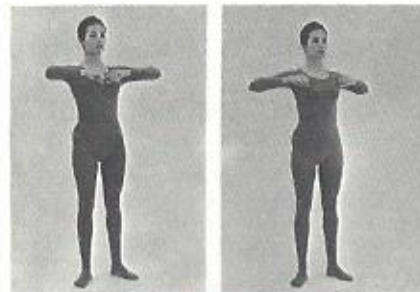
1. BEND AND STRETCH

Starting position: Stand erect, feet shoulder-width apart.
Action: Count 1. Bend trunk forward and down, flexing knees. Stretch gently in attempt to touch fingers to toes or floor. Count 2. Return to starting position.
Note: Do slowly, stretch and relax at intervals rather than in rhythm.



2. KNEE LIFT

Starting position: Stand erect, feet together, arms at sides.
Action: Count 1. Raise left knee as high as possible, grasping leg with hands and pulling knee against body while keeping back straight. Count 2. Lower to starting position. Counts 3 and 4. Repeat with right knee.



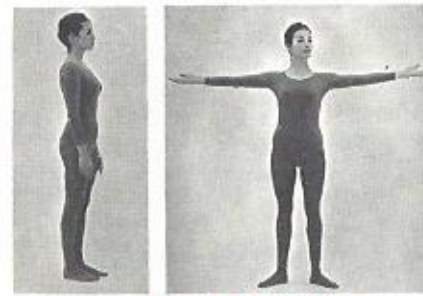
3. WING STRETCHER

Starting position: Stand erect, elbows at shoulder height, fists clenched in front of chest.
Action: Count 1. Thrust elbows backward vigorously without arching back. Keep head erect, elbows at shoulder height. Count 2. Return to starting position.



4. HALF KNEE BEND

Starting position: Stand erect, hands on hips.
Action: Count 1. Bend knees halfway while extending arms forward, palms down. Count 2. Return to starting position.



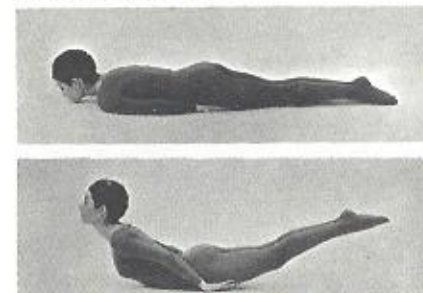
5. ARM CIRCLES

Starting position: Stand erect, arms extended sideward at shoulder height, palms up.
Action: Describe small circles backward with hands. Keep head erect. Do 15 backward circles. Reverse, turn palms down and do 15 small circles forward.



6. BODY BENDER

Starting position: Stand, feet shoulder-width apart, hands behind neck, fingers interlaced.
Action: Count 1. Bend trunk sideward to left as far as possible, keeping hands behind neck. Count 2. Return to starting position. Counts 3 and 4. Repeat to the right.



7. PRONE ARCH

Starting position: Lie face down, hands tucked under thighs.
Action: Count 1. Raise head, shoulders and legs from floor. Count 2. Return to starting position.



8. KNEE PUSHUP

Starting position: Lie on floor, face down, legs together, knees bent with feet raised off floor, hands on floor under shoulders, palms down.
Action: Count 1. Push upper body off floor until arms are fully extended and body is in straight line from head to knees. Count 2. Return to starting position.

ORIENTATION PROGRAM

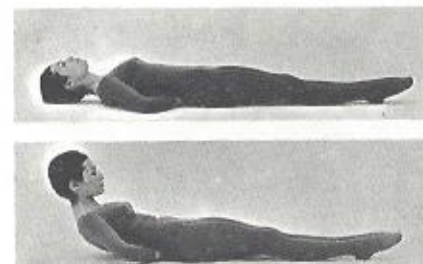
GOAL

Conditioning exercises	Repetitions
*1. Bend and stretch.....	10
*2. Knee lift.....	10 left, 10 right
*3. Wing stretcher.....	20
*4. Half knee bend.....	10
*5. Arm circles.....	15 each way
*6. Body bender.....	10 left, 10 right
7. Prone arch.....	10
8. Knee pushup.....	6
9. Head and shoulder curl.....	5
10. Ankle stretch.....	15

Circulatory activity (choose one each workout)

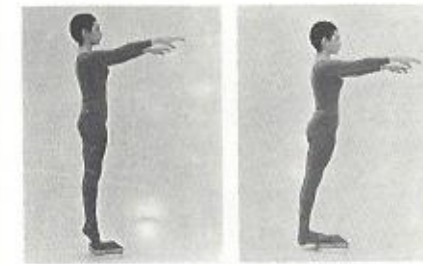
Walking.....	1/2 mile
Rope (skip 15 sec.; rest 60 sec.).....	3 series

*The first six exercises of the orientation program will be used as warmup exercises throughout the graded levels.
Step Test Record—After completing the orientation program, take the 2-minute step test (as described on pp. 16-17). Record your pulse rate here: _____. This will be the base rate with which you can make comparisons in the future.



9. HEAD AND SHOULDER CURL

Starting position: Lie on back, hands tucked under small of back, palms down.
Action: Count 1. Tighten abdominal muscles, lift head and pull shoulders and elbows off floor. Hold for four seconds. Count 2. Return to starting position.

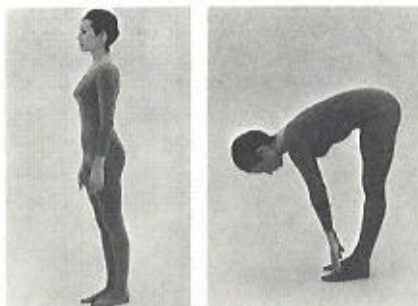


10. ANKLE STRETCH

Starting position: Stand on a stair, large book, or block of wood, with weight on balls of feet and heels raised.
Action: Count 1. Lower heels. Count 2. Raise heels.

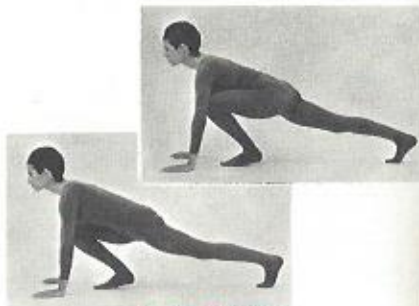
CIRCULATORY ACTIVITIES

WALKING—Step off at a lively pace, swing arms and breathe deeply. *ROPE*—Any form of skipping or jumping is acceptable. Gradually increase the tempo as your skill and condition improve.



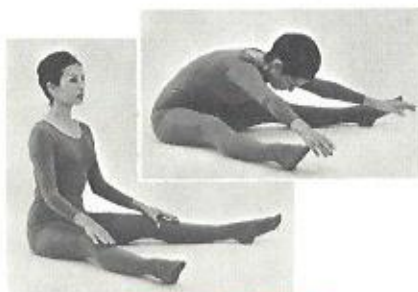
1. TOE TOUCH

Starting Position: Stand at attention.
Action: Count 1. Bend trunk forward and down, keeping knees straight, touching fingers to ankles. Count 2. Bounce and touch fingers to top of feet. Count 3. Bounce and touch fingers to toes. Count 4. Return to starting position.



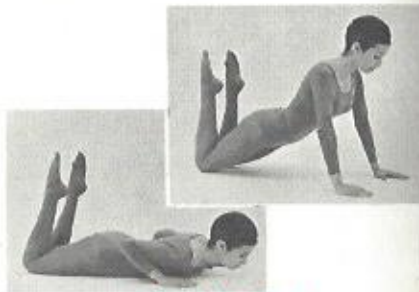
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



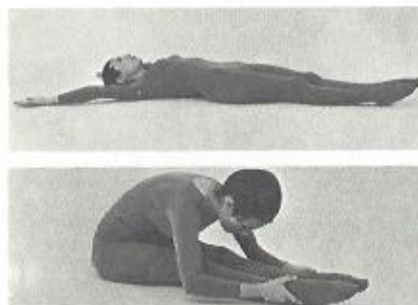
3. SITTING STRETCH

Starting position: Sit, legs spread apart, hands on knees.
Action: Count 1. Bend forward at waist, extending arms as far forward as possible. Count 2. Return to starting position.



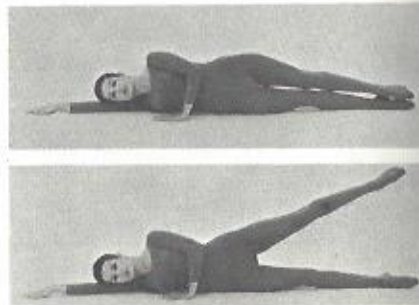
4. KNEE PUSHUP

Starting position: Lie on floor, face down, legs together, knees bent with feet raised off floor, hands on floor under shoulders, palms down.
Action: Count 1. Push upper body off floor until arms are fully extended and body is in straight line from head to knees. Count 2. Return to starting position.



5. SITUP (ARMS EXTENDED)

Starting position: Lie on back, legs straight and together, arms extended beyond head.
Action: Count 1. Bring arms forward over head, roll up to sitting position, sliding hands along legs, grasping ankles. Count 2. Roll back to starting position.



6. LEG RAISER

Starting position: Right side of body on floor, head resting on right arm.
Action: Lift left leg about 24" off floor, then lower it. Do required number of repetitions. Repeat on other side.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch	5
2. Sprinter	8
3. Sitting stretch	10
4. Knee pushup	8
5. Situp (arms extended)	5
6. Leg raiser	5 each leg
7. Flutter kick	20

Circulatory activity (choose one each workout)

Walking (120 steps a minute)	1/4 mile
Rope (skip 30 secs., rest 60 secs.)	2 series
Run in place (run 50, straddle hop 10 - 2 cycles)	2 minutes

Water activities—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)													Prove-out workouts		



7. FLUTTER KICK

Starting position: Lie face down, hands tucked under thighs.
Action: Arch the back, bringing chest and head up, then flutter kick continuously, moving the legs 8"-10" apart. Kick from hips with knees slightly bent. Count each kick as one.

CIRCULATORY ACTIVITIES

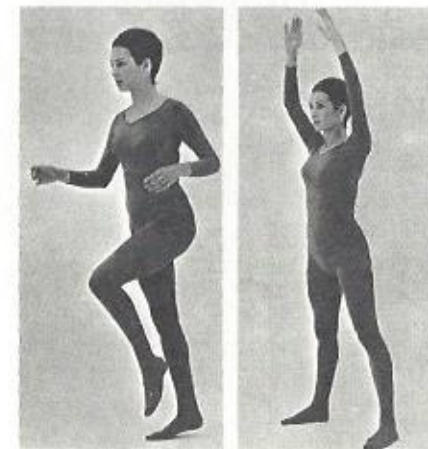
WALKING—Maintain a pace of 120 steps per minute for a distance of 1/4 mile. Swing arms and breathe deeply.

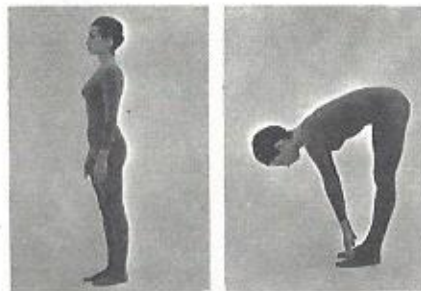
ROPE—Skip or jump rope continuously using any form for 30 seconds and then rest 60 seconds. Repeat 2 times.

RUN IN PLACE—Raise each foot at least 4" off the floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—*Starting position:* At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.





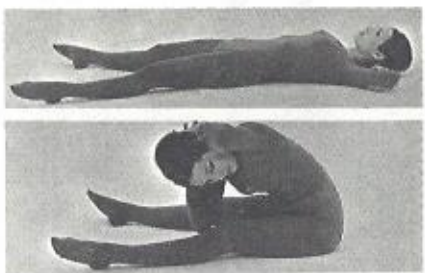
1. TOE TOUCH

Starting position: Stand at attention.
Action: Count 1. Bend trunk forward and down, keeping knees straight, touching fingers to ankles. Count 2. Bounce and touch fingers to top of feet. Count 3. Bounce and touch fingers to toes. Count 4. Return to starting position.



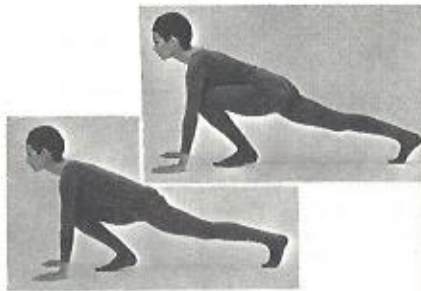
3. SITTING STRETCH

Starting position: Sit, legs spread apart, hands on knees.
Action: Count 1. Bend forward at waist, extending arms as far forward as possible. Count 2. Return to starting position.



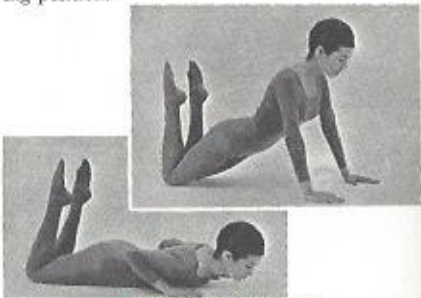
5. SITUP (FINGERS LACED)

Starting position: Lie on back, legs straight and feet spread approximately 1' apart. Fingers laced behind neck.
Action: Count 1. Curl up to sitting position and turn trunk to left. Touch right elbow to left knee. Count 2. Return to starting position. Count 3. Curl up to sitting position and turn trunk to right. Touch left elbow to right knee. Count 4. Return to starting position. Score one situp each time you return to starting position. Knees may be bent as necessary.



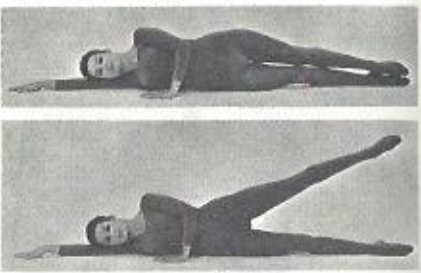
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



4. KNEE PUSHUP

Starting position: Lie on floor, face down, legs together, knees bent with feet raised off floor, hands on floor under shoulders, palms down.
Action: Count 1. Push upper body off floor until arms are fully extended and body is in straight line from head to knees. Count 2. Return to starting position.



6. LEG RAISER

Starting position: Right side of body on floor, head resting on right arm.
Action: Lift left leg about 24" off floor, then lower it. Do required number of repetitions. Repeat on other side.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch.....	10
2. Sprinter.....	12
3. Sitting stretch.....	15
4. Knee pushup.....	12
5. Situp (fingers laced).....	10
6. Leg raiser.....	10 each leg
7. Flutter kick.....	30

Circulatory activity (choose one each workout)

Jog-walk (jog 50, walk 50).....	1/2 mile
Rope (skip 30 secs., rest 60 secs.).....	3 series
Run in place (run 80, hop 15 - 2 cycles).....	3 minutes

Water Activities—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)															
															Prove-out workouts



7. FLUTTER KICK

Starting position: Lie face down, hands tucked under thighs.
Action: Arch the back, bringing chest and head

up, then flutter kick continuously, moving the legs 8"-10" apart. Kick from hips with knees slightly bent. Count each kick as one.

CIRCULATORY ACTIVITIES

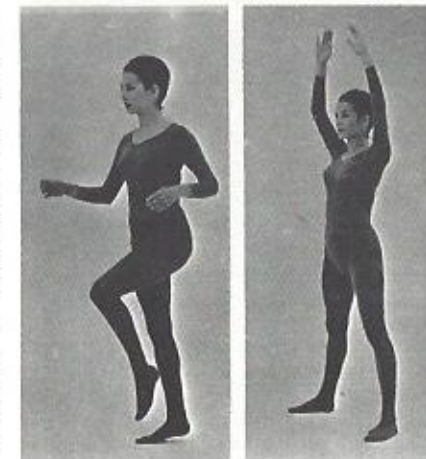
JOG-WALK—Jog and walk alternately for number of paces indicated on chart for distance specified.

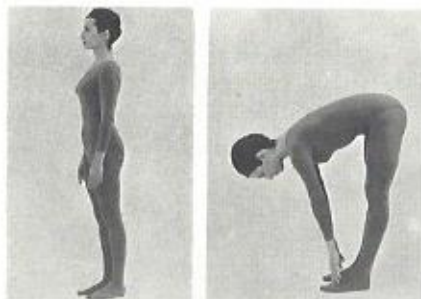
ROPE—Skip or jump rope continuously using any form for 30 seconds and then rest 60 seconds. Repeat 3 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—Starting position: At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.





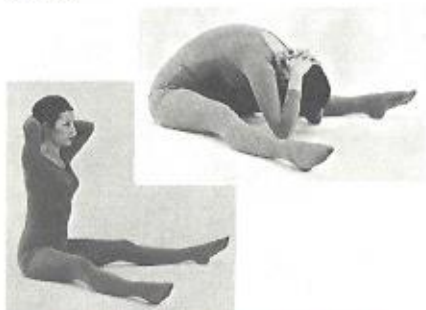
1. TOE TOUCH

Starting position: Stand at attention.
Action: Count 1. Bend trunk forward and down, keeping knees straight, touching fingers to ankles. Count 2. Bounce and touch fingers to top of feet. Count 3. Bounce and touch fingers to toes. Count 4. Return to starting position.



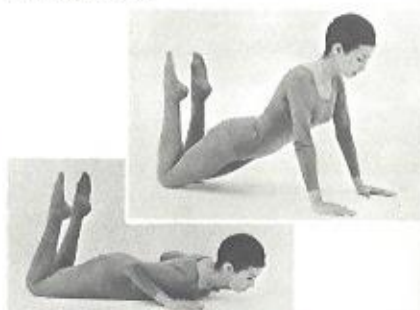
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



3. SITTING STRETCH (FINGERS LACED)

Starting position: Sit, legs spread apart, fingers laced behind neck.
Action: Count 1. Bend forward at waist, reaching elbows as close to floor as possible. Count 2. Return to starting position.



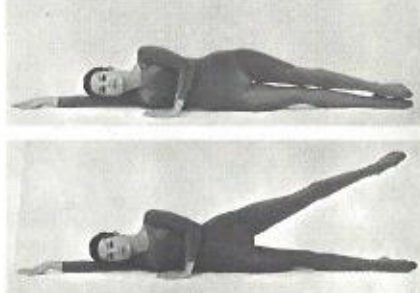
4. KNEE PUSHUP

Starting position: Lie on floor, face down, legs together, knees bent with feet raised off floor, hands on floor under shoulders, palms down.
Action: Count 1. Push upper body off floor until arms are fully flexed and body in straight line from head to knees. Count 2. Return to starting position.



5. SITUP (ARMS EXTENDED, KNEES UP)

Starting position: Lie on back, legs straight, arms extended overhead.
Action: Count 1. Sit up, reaching forward with arms encircling knees while pulling them tightly to chest. Count 2. Return to starting position. Do this exercise rhythmically, without breaks in the movement.



6. LEG RAISER

Starting position: Right side of body on floor, head resting on right arm.
Action: Lift left leg about 24" off floor, then lower it. Do required number of repetitions. Repeat on other side.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch.....	20
2. Sprinter.....	16
3. Sitting stretch (fingers laced).....	15
4. Knee pushup.....	20
5. Situp (arms extended, knees up).....	15
6. Leg raiser.....	16 each leg
7. Flutter kick.....	40

Circulatory activity (choose one each workout)

Jog-walk (jog 50, walk 50).....	3/4 mile
Rope (skip 45 secs., rest 30 secs.).....	3 series
Run in place (run 110, hop 20 - 2 cycles).....	4 minutes

Water activities—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)															Prove-out workouts



7. FLUTTER KICK

Starting position: Lie face down, hands tucked under thighs.
Action: Arch the back, bringing chest and head

up. Then flutter kick continuously, moving the legs 8"-10" apart. Kick from hips with knees slightly bent. Count each kick as one.

CIRCULATORY ACTIVITIES

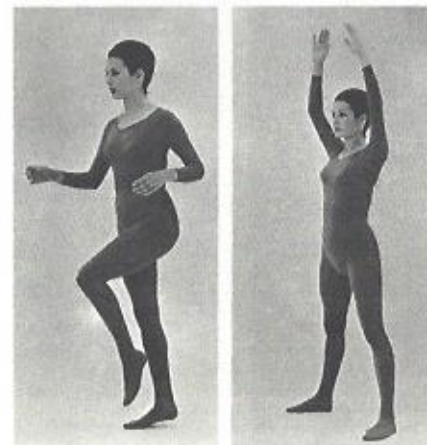
JOG-WALK—Jog and walk alternately for number of paces indicated on chart for distance specified.

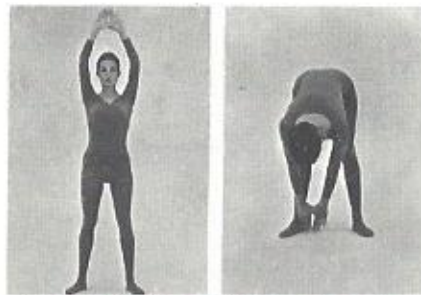
ROPE—Skip or jump rope continuously using any form for 45 seconds and then rest 30 seconds. Repeat 3 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—Starting position: At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.





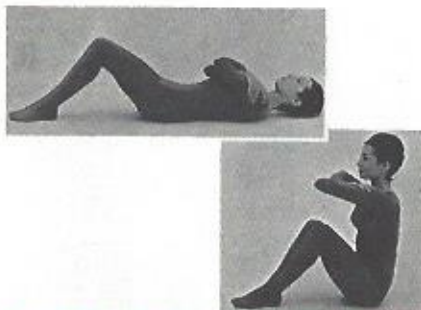
1. TOE TOUCH (TWIST AND BEND)

Starting position: Stand, feet shoulder-width apart, arms extended overhead, thumbs interlocked.
Action: Count 1. Twist trunk to right and touch floor inside right foot with fingers of both hands. Count 2. Touch floor outside toes of right foot. Count 3. Touch floor outside heel of right foot. Count 4. Return to starting position, sweeping trunk and arms upward in a wide arc. On the next four counts, repeat action to left side.



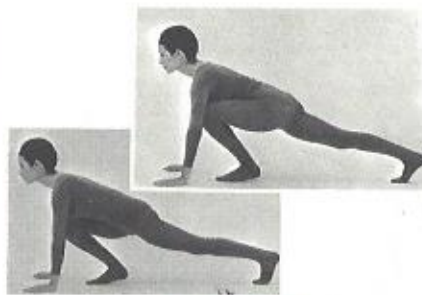
3. SITTING STRETCH (ALTERNATE)

Starting position: Sit, legs spread apart, fingers laced behind neck, elbows back.
Action: Count 1. Bend forward to left, touching forehead to left knee. Count 2. Return to starting position. Counts 3 and 4. Repeat to right. Score one repetition each time you return to starting position. Knees may be bent if necessary.



5. SITUP (ARMS CROSSED, KNEES BENT)

Starting position: Lie on back, arms crossed on chest, hands grasping opposite shoulders, knees bent to right angle, feet flat on floor.
Action: Count 1. Curl up to sitting position. Count 2. Return to starting position.



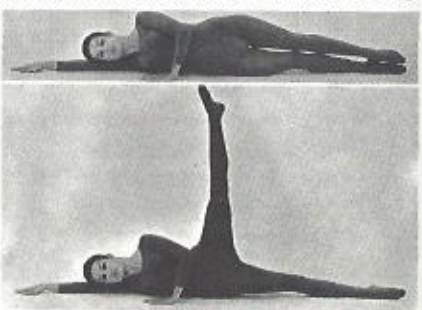
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



4. PUSHUP

Starting position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.
Action: Count 1. Push body off floor by extending arms so that weight rests on hands and toes. Count 2. Lower the body until chest touches floor.
Note: Body should be kept straight, buttocks should not be raised, abdomen should not sag.



6. LEG RAISER (WHIP)

Starting position: Right side of body on floor, right arm supporting head.
Action: Whip left leg up and down rapidly lifting as high as possible off the floor. Count each whip as one. Reverse position and whip right leg up and down.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch (twist and bend).....	15 each side
2. Sprinter.....	20
3. Sitting stretch (alternate).....	20
4. Pushup.....	8
5. Situp (arms crossed, knees bent).....	20
6. Leg raiser (whip).....	10 each leg
7. Prone arch (arms extended).....	15

Circulatory activity (choose one each workout)

Jog-walk (jog 100, walk 50).....	1 mile
Rope (skip 60 secs.; rest 30 secs.).....	3 series
Run in place (run 145, hop 25 - 2 cycles).....	5 minutes

Water activities—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)															Prove-out workouts



7. PRONE ARCH (ARMS EXTENDED)

Starting position: Lie face down, legs straight and together, arms extended to sides at shoulder level.



Action: Count 1. Arch the back, bringing arms, chest and head up, and raising legs as high as possible. Count 2. Return to starting position.

CIRCULATORY ACTIVITIES

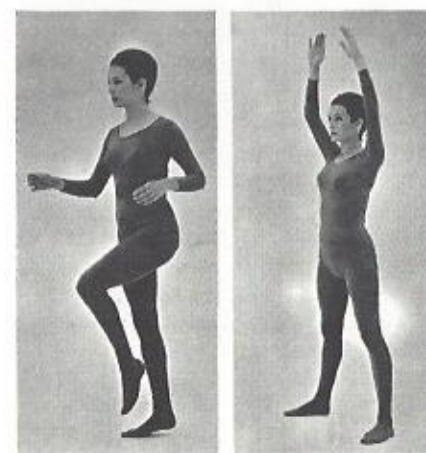
JOG-WALK—Jog and walk alternately for number of paces indicated on chart for distance specified.

ROPE—Skip or jump rope continuously using any form for 60 seconds and then rest 30 seconds. Repeat 3 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—**Starting position:** At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.



Staying fit

Once you have reached the level of conditioning you have chosen for yourself, you will wish to maintain your fitness.

To do so, continue the workouts at that level.

While it has been found possible to maintain fitness with three workouts a week, ideally, exercise should be a daily habit. If you can, by all means continue your workouts on a five-times-a-week basis.

If at any point—either after reaching your goal or in the process of doing so—your workouts are interrupted because of illness or other reason for more than a week, it will be best to begin again at a lower level. If you have had a serious illness or surgery, proceed under your physician's guidance.

SEPTEMBER						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 X	2 Recruit Recruit	3 Recruit Recruit	4 X <i>R.S. at 1:00 p.m.</i>	5 X	6 X	7 X <i>off work</i>
8 X	9 X <i>1st S. swim lesson</i>	10 X	11 X <i>3+5</i>	12 X <i>1st S. swim lesson</i>	13 X <i>3+5</i>	14 <i>Black Stadium 1:30</i>
15 <i>1st S. swim lesson 2:30</i>	16	17 <i>M.A. for lunch</i>	18	19	20	21
22	23	24	25	26	27	28
29	30	September		<small>AUGUST</small> <small>1 2 3</small> <small>4 5 6 7 8 9 10</small> <small>11 12 13 14 15 16 17</small> <small>18 19 20 21 22 23 24</small> <small>25 26 27 28 29 30 31</small>		<small>OCTOBER</small> <small>1 2 3 4 5</small> <small>6 7 8 9 10 11 12</small> <small>13 14 15 16 17 18 19</small> <small>20 21 22 23 24 25 26</small> <small>27 28 29 30 31</small>

Broadening your program

The exercises and activities you have engaged in are basic—designed to take you soundly and progressively up the ladder to physical fitness without need for special equipment or facilities.

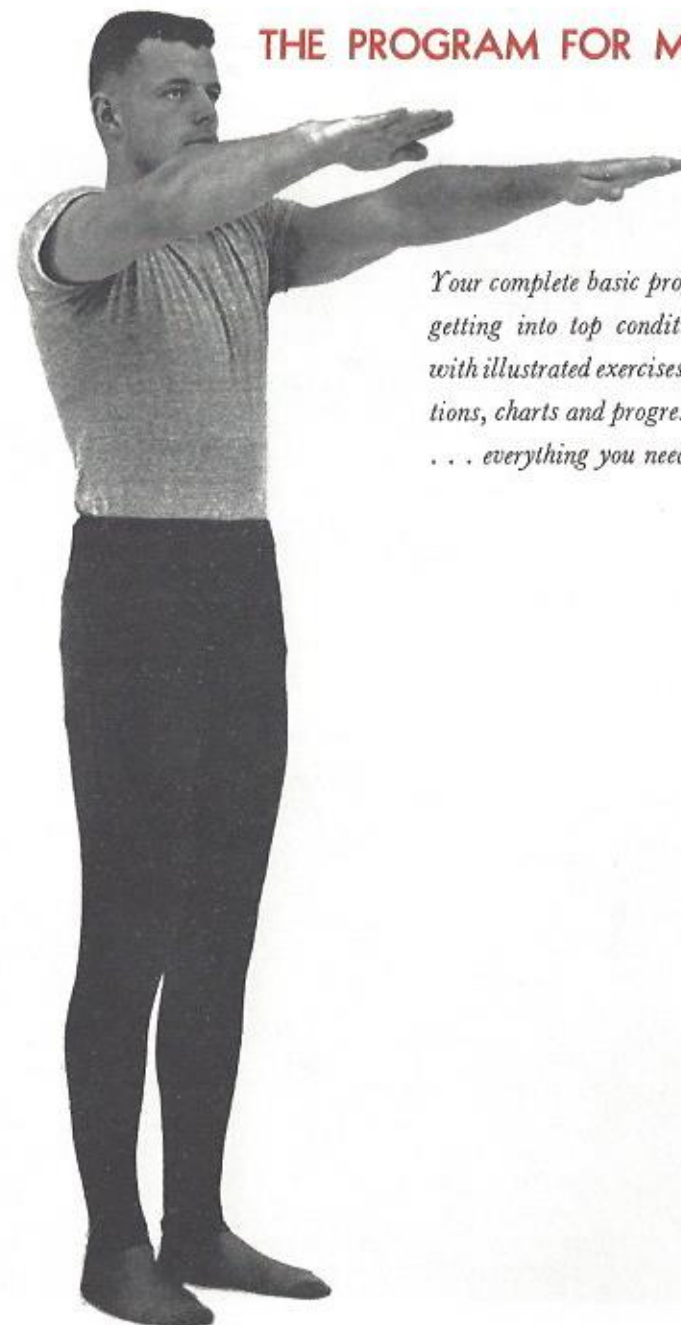
There are many other activities and forms of exercise which, if you wish, you may use to supplement the basic program. You will find them discussed in Section IV.

They include a variety of sports; water exercises you can use if you have access to a pool; and isometrics—sometimes called exercises without movement—which take little time (6–8 seconds each). One isometric—the abdominal—is particularly valuable for many women; it helps strengthen muscles that can act like a girdle to maintain a trim waistline.

You'll find suggestions, too, for improving posture—and also for taking advantage of many daily opportunities for sound physical activity.

SECTION III

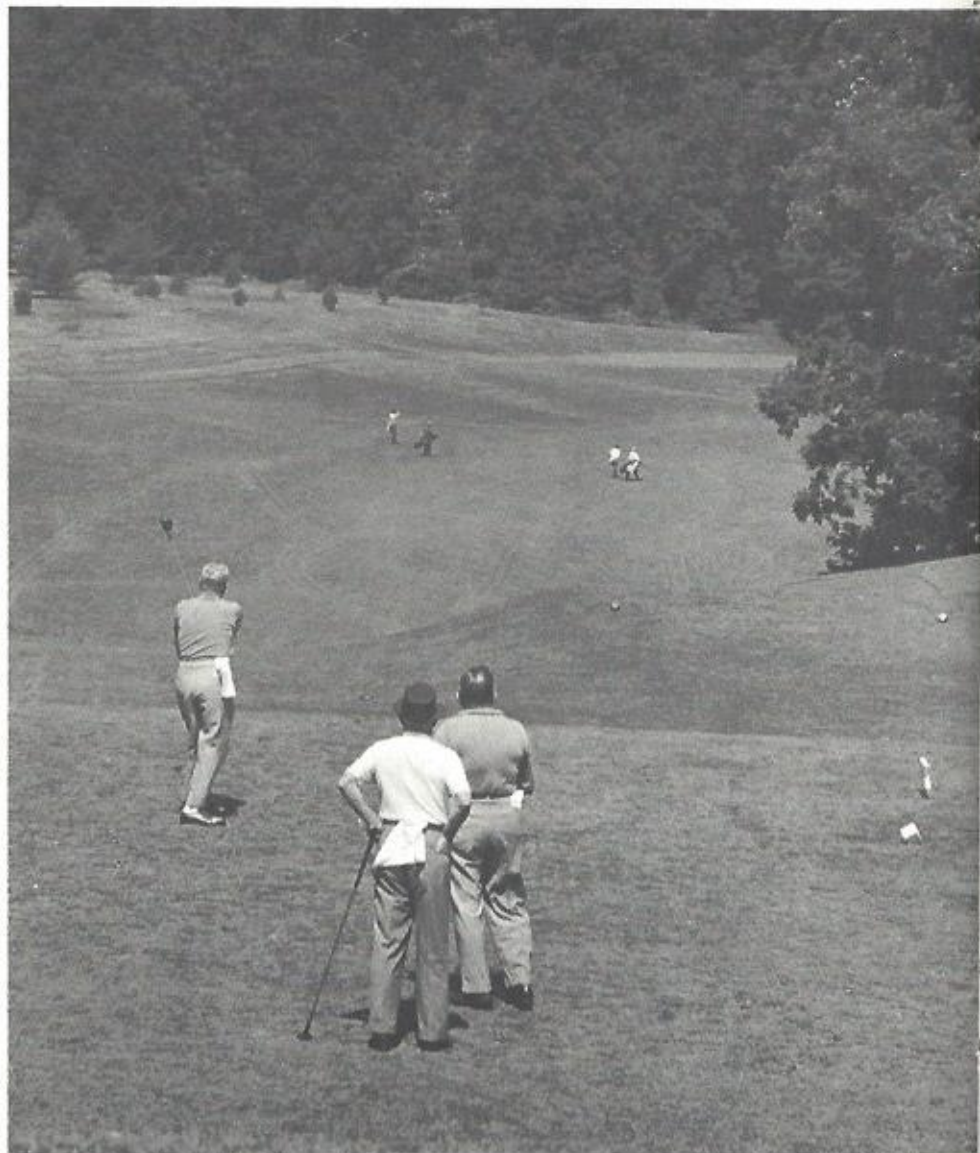
THE PROGRAM FOR MEN



Your complete basic program for getting into top condition . . . with illustrated exercises, instructions, charts and progress records . . . everything you need.

Before you begin

A medical checkup at least once a year is generally advisable for every man. It's an excellent idea to have such an examination now before beginning your conditioning program.



Very probably, you'll get an unlimited go-ahead. If there should be a health problem, your doctor can take steps to correct it and may have suggestions, too, for modifying the program to make it more suitable and effective for you.

With an examination under your belt, you can proceed confidently.

About the program

It assumes you have not—recently and consistently—been exposed to vigorous, all-round physical activity . . . which could be true even if you play golf once or twice a week or engage in some other sport; no one sport provides for balanced development of all parts of the body.

The plan starts with an orientation—"get-set"—series of mild exercises to limber up all major muscle groups and help assure a painless transition.

There are then five graded levels.

As you move up from one to the next, you will be building toward a practical and satisfactory level of fitness.

By building gradually—progressively—you will be building soundly.

What the exercises are for

There are three general types—warmup exercises, conditioning exercises and circulatory activities.

The warmup exercises stretch and limber up the muscles and speed up the action of the heart and lungs, thus preparing the body for greater exertion and reducing the possibility of unnecessary strain.

The conditioning exercises are systematically planned to tone up abdominal, back, leg, arm and other major muscles.

The circulatory activities produce contractions of large muscle groups for relatively longer periods than the conditioning exercises—to stimulate and strengthen the circulatory and respiratory systems.

The plan calls for doing 10 mild exercises during the orientation period and, thereafter, the warmup exercises and the seven conditioning exercises listed for each level. The first six exercises of the orientation program are used as warmup exercises throughout the graded levels.

When it comes to the circulatory activities, you select one each workout. Alternately running and walking . . . skipping rope . . . running in place. All are effective. You can switch about for variety.

How you progress

Right now, you have limited tolerance for exercise, can do just so much without discomfort and fatigue.

A sound conditioning program should gradually stretch your tolerance. It should give unused or little-used muscles moderate tasks at first, then make the tasks increasingly more demanding so you become able to achieve more and more with less and less fatigue and with increasingly rapid recovery.

As you move from level to level, some exercises will be modified so they call for more effort. Others will remain the same but you will build strength and stamina by increasing the number of repetitions.

You will be increasing your fitness another way as well.

At level 1, your objective will be to gradually reduce, from workout to workout, the "breathing spells" between exercises until you can do the seven conditioning exercises without resting. You will proceed in the same fashion with the more difficult exercises and increased repetitions at succeeding levels.

You will find the program designed—the progression carefully planned—to make this feasible. You will be able to proceed at your own pace, competing with yourself rather than with anyone else—and this is of great importance for sound conditioning.

Note: Gradually speeding up, from workout to workout, the rate at which you do each exercise will provide greater stimulation for the circulatory and respiratory systems and also help to keep your workouts short. However, the seven conditioning exercises should not be a race against time. Perform each exercise completely to insure maximum benefit.

What should your goal be?

There is no need to decide that now.

Many men will be able to complete the first three levels. Some will go on to level 4, which is challenging. The fifth is one which only extremely vigorous, well-conditioned men will reach.

Not everybody is physically constituted to play par golf or run a mile in under four minutes. Other factors in determining what your peak level will be is your body's built-in capacity, your age and previous conditioning.

But another factor can be very important.

As you know, it's much easier to accomplish something when you wish to accomplish it, believe you can, and enjoy the process.

Chances are, after several months of workouts, you will find it hard to believe you could do so little at the beginning.

As your physical tolerance for exercise increases, your psychological tolerance also will stretch—especially as you enjoy such results of your increasing fitness as trimmer appearance, growing energy for daily activities, more zest for play and a marked sense of well-being.

As you progress, you may realize that you can—and want to—go a long way. Go as far as you can.

The important point is that no matter what level you choose—three, four, or five—you will have gone far, achieved great improvement—and you will be able to maintain that improvement.

When and how often to work out

To be most beneficial, exercise should become part of your regular daily routine—as much as bathing, shaving, dressing.

Five workouts a week are called for throughout the program.

You can choose any time that is convenient. Preferably, it should be the same time every day—but it does not matter whether it's first thing in the morning, before dinner in the evening, just before retiring, any other time.

How long at each level

The time can vary between individuals. It may vary, too, for you from one level to another.

Your objective, as already noted, will be to reach a point at each level at which you can do all the exercises called for, for the number of times indicated, without resting.

But start slowly. There is no rush. You are building for a lifetime of physical fitness and by avoiding rush you will avoid sudden strains and excesses that could make you ache and hold you back.

If you find yourself unable at first to complete any exercise—to do, continuously, all the repetitions called for—stop when you encounter difficulty. Rest briefly, then take up where you left off and complete the count. If you have difficulty at first, you will have less and less in succeeding workouts.

Stay at each level for at least three weeks. If you have not passed the prove-out test at the end of that time, continue at the same level until you do. The prove-out test calls for performing—in three consecutive workouts—the seven conditioning exercises without resting and satisfactorily fulfilling the requirement for one circulatory activity.

A measure of your progress

You will, of course, be able to observe the increase in your strength and stamina from week to week in many ways—including the increasing facility with which you do the exercises at a given level.

In addition, there is a 2-minute step test you can use to measure and keep a running record of the improvement in your circulatory efficiency, one of the most important of all aspects of fitness.

The immediate response of the cardiovascular system to exercise differs markedly between well-conditioned individuals and others. The test measures the response in terms of pulse rate taken shortly after a series of steps up and down onto a bench or chair.

Although it does not take long, it is necessarily vigorous. Stop if you become overly fatigued while taking it. You should not try it until you have completed the orientation period.



The test

Use any sturdy bench or chair 15-17 inches in height.

Count 1—Place right foot on bench.

Count 2—Bring left foot alongside of right and stand erect.

Count 3—Lower right foot to floor.

Count 4—Lower left foot to floor.

Repeat the 4-count movement 30 times a minute for two minutes.

THEN sit down on bench or chair for two minutes.

FOLLOWING the 2-minute rest, take your pulse for 30 seconds.

Double the count to get the per-minute rate. (You can find the pulse by applying middle and index fingers of one hand firmly to the inside of the wrist of the other hand, on the thumb side.)

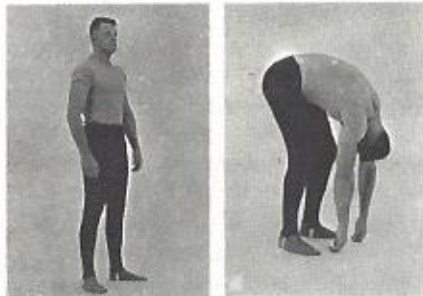
Record your score for future comparisons. In succeeding tests—about once every two weeks—you probably will find your pulse rate becoming lower as your physical condition improves.

Three important points:

1. For best results, do not engage in physical activity for at least 10 minutes before taking the test. Take it at about the same time of day and always use the same bench or chair.

2. Remember that pulse rates vary among individuals. This is an individual test. What is important is not a comparison of your pulse rate with that of anybody else—but rather a record of how your own rate is reduced as your fitness increases.

3. As you progress, the rate at which your pulse is lowered should gradually level off. This is an indication that you are approaching peak fitness.

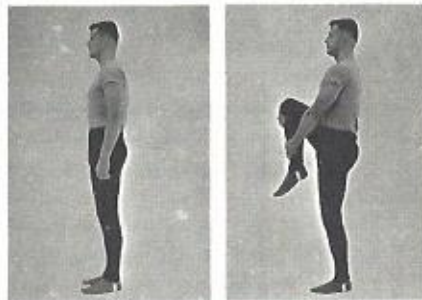


1. BEND AND STRETCH

Starting position: Stand erect, feet shoulder-width apart.

Action: Count 1. Bend trunk forward and down, flexing knees. Stretch gently in attempt to touch fingers to toes or floor. Count 2. Return to starting position.

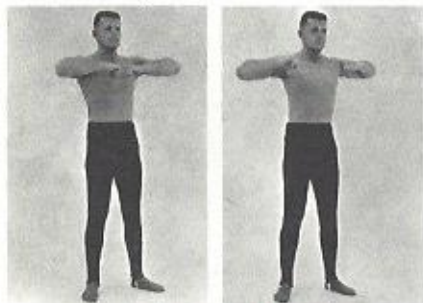
Note: Do slowly, stretch and relax at intervals rather than in rhythm.



2. KNEE LIFT

Starting position: Stand erect, feet together, arms at sides.

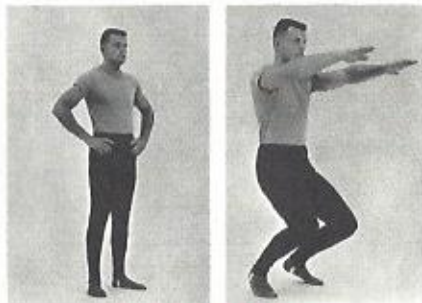
Action: Count 1. Raise left knee as high as possible, grasping leg with hands and pulling knee against body while keeping back straight. Count 2. Lower to starting position. Counts 3 and 4. Repeat with right knee.



3. WING STRETCHER

Starting position: Stand erect, elbows at shoulder height, fists clenched in front of chest.

Action: Count 1. Thrust elbows backward vigorously without arching back. Keep head erect, elbows at shoulder height. Count 2. Return to starting position.



4. HALF KNEE BEND

Starting position: Stand erect, hands on hips.

Action: Count 1. Bend knees halfway while extending arms forward, palms down. Count 2. Return to starting position.

ORIENTATION PROGRAM

GOAL

Conditioning Exercises

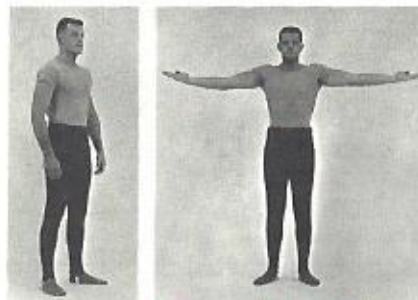
Repetitions

*1. Bend and stretch	10
*2. Knee lift	10 left, 10 right
*3. Wing stretcher	20
*4. Half knee bend	10
*5. Arm circles	15 each way
*6. Body bender	10 left, 10 right
7. Prone arch	10
8. Knee pushup	6
9. Head and shoulder curl	5
10. Ankle stretch	15

Circulatory activity (choose one each workout)

Walking	1/2 mile
Rope (skip 15 secs.; rest 60 secs.)	3 series

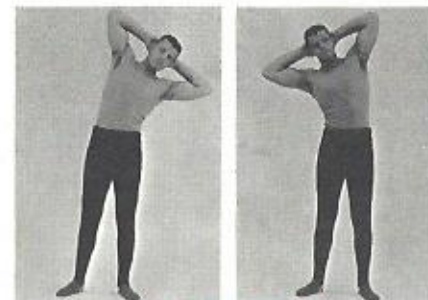
*The first six exercises of the Orientation program will be used as warmup exercises throughout the graded levels. *Step Test Record*—After completing the orientation program, take the 2-minute step test (as described on pp. 88-89). Record your pulse rate here: ____ This will be the base rate with which you can make comparisons in the future.



5. ARM CIRCLES

Starting position: Stand erect, arms extended sideward at shoulder height, palms up.

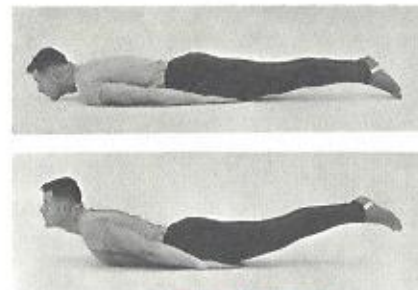
Action: Describe small circles backward with hands. Keep head erect. Do 15 backward circles. Reverse, turn palms down and do 15 small circles forward.



6. BODY BENDER

Starting position: Stand, feet shoulder-width apart hands behind neck, fingers interlaced.

Action: Count 1. Bend trunk sideward to left as far as possible, keeping hands behind neck. Count 2. Return to starting position. Counts 3 and 4. Repeat to the right.



7. PRONE ARCH

Starting position: Lie face down, hands tucked under thighs.

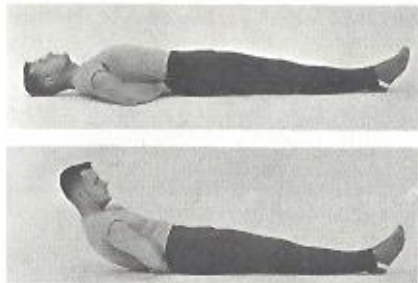
Action: Count 1. Raise head, shoulders, and legs from floor. Count 2. Return to starting position.



8. KNEE PUSHUP

Starting position: Lie on floor, face up, legs together, knees bent with feet raised off floor, hands on floor under shoulders, palms down.

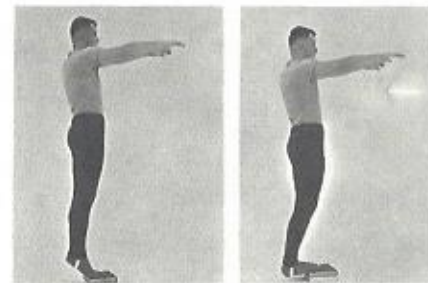
Action: Count 1. Push upper body off floor until arms are fully extended and body is in straight line from head to knees. Count 2. Return to starting position.



9. HEAD AND SHOULDER CURL

Starting position: Lie on back, hands tucked under small of back, palms down.

Action: Count 1. Tighten abdominal muscles, lift head and pull shoulders and elbows up off floor. Hold for four seconds. Count 2. Return to starting position.



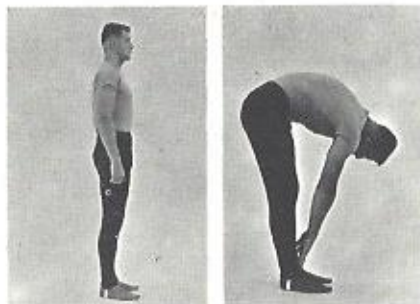
10. ANKLE STRETCH

Starting position: Stand on a stair, large book or block of wood, with weight on balls of feet and heels raised.

Action: Count 1. Lower heels. Count 2. Raise heels.

CIRCULATORY ACTIVITIES

WALKING—Step off at a lively pace, swing arms and breathe deeply. *ROPE*—Any form of skipping or jumping is acceptable. Gradually increase the tempo as your skill and condition improve.



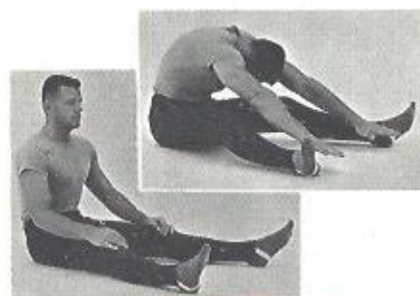
1. TOE TOUCH

Starting position: Stand at attention.
Action: Count 1. Bend trunk forward and down keeping knees straight, touching fingers to ankles. Count 2. Bounce and touch fingers to top of feet. Count 3. Bounce and touch fingers to toes. Count 4. Return to starting position.



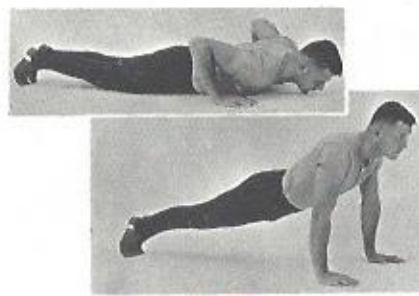
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands and extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



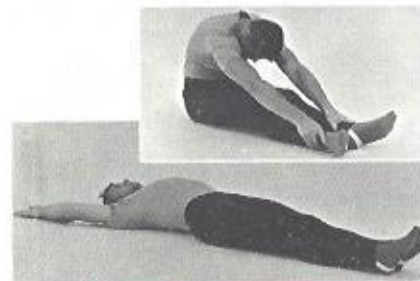
3. SITTING STRETCH

Starting position: Sit, legs spread apart, hands on knees.
Action: Count 1. Bend forward at waist, extending arms as far forward as possible. Count 2. Return to starting position.



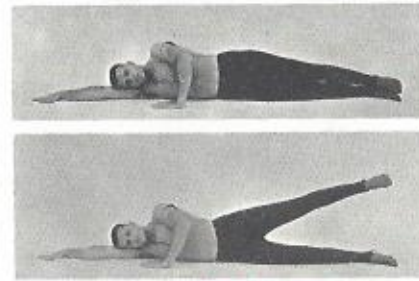
4. PUSHUP

Starting position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.
Action: Count 1. Push body off floor by extending arms, so that weight rests on hands and toes. Count 2. Lower the body until chest touches floor.
Note: Body should be kept straight, buttocks should not be raised, abdomen should not sag.



5. SITUP (ARMS EXTENDED)

Starting position: Lie on back, legs straight and together, arms extended beyond head.
Action: Count 1. Bring arms forward over head, roll up to sitting position, sliding hands along legs, grasping ankles. Count 2. Roll back to starting position.



6. LEG RAISER

Starting position: Right side of body on floor, head resting on right arm.
Action: Lift left leg about 24" off floor, then lower it. Do required number of repetitions. Repeat on other side.



Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch.....	10
2. Sprinter.....	12
3. Sitting stretch.....	12
4. Pushup.....	4
5. Situp (arms extended).....	5
6. Leg raiser.....	12 each leg
7. Flutter kick.....	30

Circulatory activity (choose one each workout)

Walking (120 steps a minute).....	1 mile
Rope (skip 30 secs.; rest 30 secs.).....	3 series
Run in place (run 60, hop 10 - 2 cycles).....	2 minutes

Water activities —See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)													Prove-out workouts		



7. FLUTTER KICK

Starting position: Lie face down, hands tucked under thighs.
Action: Arch the back, bringing chest and head

up, then flutter kick continuously, moving the legs 8"-10" apart. Kick from hips with knees slightly bent. Count each kick as one.

CIRCULATORY ACTIVITIES

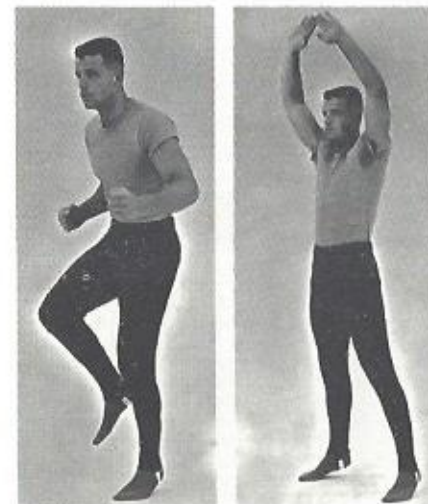
WALKING—Maintain a pace of 120 steps per minute for a distance of 1 mile. Swing arms and breathe deeply.

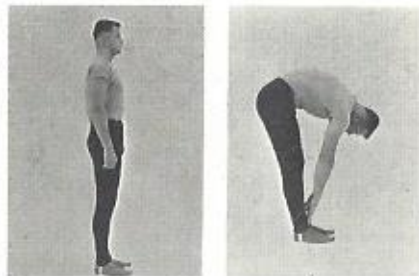
ROPE—Skip or jump rope continuously using any form for 30 seconds and then rest 30 seconds. Repeat 2 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete the number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—*Starting position:* At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.





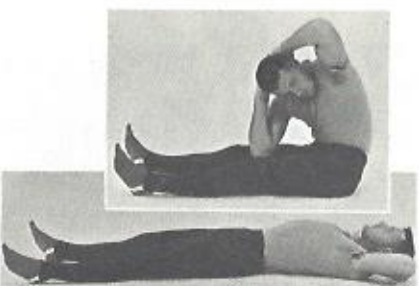
1. TOE TOUCH

Starting position: Stand at attention.
Action: Count 1. Bend trunk forward and down keeping knees straight, touching fingers to ankles. Count 2. Bounce and touch fingers to top of feet. Count 3. Bounce and touch fingers to toes. Count 4. Return to starting position.



3. SITTING STRETCH

Starting position: Sit, legs spread apart, hands on knees.
Action: Count 1. Bend forward at waist, extending arms as far forward as possible. Count 2. Return to starting position.



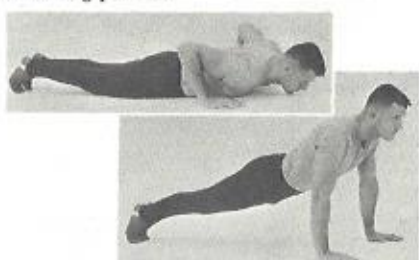
5. SITUP (FINGERS LACED)

Starting position: Lie on back, legs straight and feet spread approximately 1' apart. Fingers laced behind neck.
Action: Count 1. Curl up to sitting position and turn trunk to left. Touch the right elbow to left knee. Count 2. Return to starting position. Count 3. Curl up to sitting position and turn trunk to right. Touch left elbow to right knee. Count 4. Return to starting position. Score one situp each time you return to starting position. Knees may be bent as necessary.



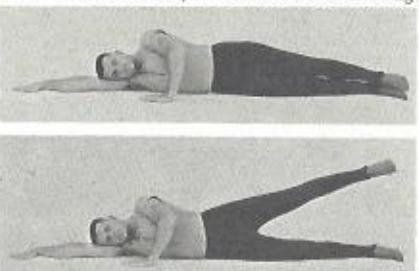
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands and extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



4. PUSHUP

Starting position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.
Action: Count 1. Push body off floor by extending arms, so that weight rests on hands and toes. Count 2. Lower the body until chest touches floor.
Note: Body should be kept straight, buttocks should not be raised, abdomen should not sag.



6. LEG RAISER

Starting position: Right side of body on floor, head resting on right arm.
Action: Lift left leg about 24" off floor, then lower it. Do required number of repetitions. Repeat on other side.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetition

1. Toe touch.....	20
2. Sprinter.....	16
3. Sitting stretch.....	18
4. Pushup.....	10
5. Situp (fingers laced).....	20
6. Leg raiser.....	16 each leg
7. Flutter kick.....	40

Circulatory activity (choose one each workout)

Jog-walk (jog 100, walk 100).....	1 mile
Rope (skip 1 min.; rest 1 min.).....	3 series
Run in place (run 95, hop 15 - 2 cycles).....	3 minutes

Water activities—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)													Prove-out workouts		



7. FLUTTER KICK

Starting position: Lie face down, hands tucked under thighs.
Action: Arch the back, bringing chest and head

up, then flutter kick continuously, moving the legs 8"-10" apart. Kick from hips with knees slightly bent. Count each kick as one.

CIRCULATORY ACTIVITIES

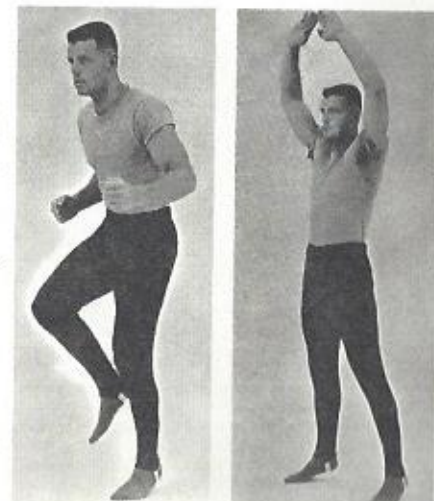
JOG-WALK—Jog and walk alternately for number of paces indicated on chart for distance specified.

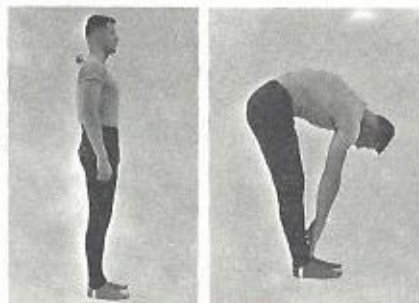
ROPE—Skip or jump rope continuously using any form for 60 seconds and then rest 60 seconds. Repeat 3 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete the number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—Starting position: At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.





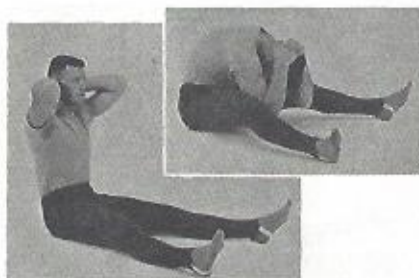
1. TOE TOUCH

Starting position: Stand at attention.
Action: Count 1. Bend trunk forward and down keeping knees straight, touching fingers to ankles. Count 2. Bounce and touch fingers to top of feet. Count 3. Bounce and touch fingers to toes. Count 4. Return to starting position.



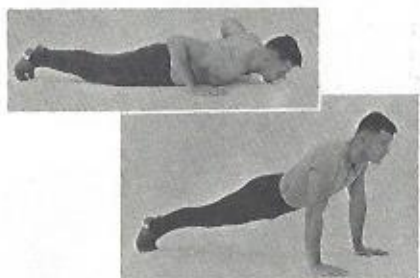
2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.
Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.



3. SITTING STRETCH (FINGERS LACED)

Starting position: Sit, legs spread apart, fingers laced behind neck, elbows back.
Action: Count 1. Bend forward at waist, reaching elbows as close to floor as possible. Count 2. Return to starting position.



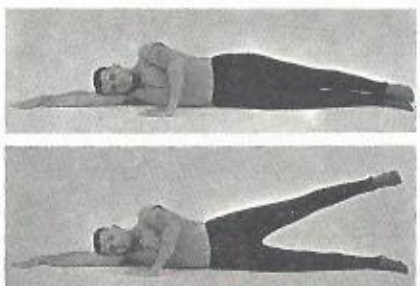
4. PUSHUP

Starting position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.
Action: Count 1. Push body off floor by extending arms, so that weight rests on hands and toes. Count 2. Lower the body until chest touches floor.
Note: Body should be kept straight, buttocks should not be raised, abdomen should not sag.



5. SITUP (ARMS EXTENDED, KNEES UP)

Starting position: Lie on back, legs straight, arms extended overhead.
Action: Count 1. Sit up, reaching forward with arms encircling knees while pulling them tightly to chest. Count 2. Return to starting position. Do this exercise rhythmically, without breaks in the movement.



6. LEG RAISER

Starting position: Right side of body on floor, head resting on right arm.
Action: Lift left leg about 24" off floor then lower it. Do required number of repetitions. Repeat on other side.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetition

1. Toe touch.....	30
2. Sprinter.....	20
3. Sitting stretch (fingers laced).....	18
4. Pushup.....	20
5. Situp (arms extended, knees up).....	30
6. Leg raiser.....	20 each leg
7. Flutter kick.....	50

Circulatory activity (choose one each workout)

Jog-walk (jog 200; walk 100).....	1½ miles
Rope (skip 1 min.; rest 1 min.).....	5 series
Run in place (run 135, hop 20 - 2 cycles).....	4 minutes

Water activity—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)													Prove-out workouts		



7. FLUTTER KICK

Starting position: Lie face down, hands tucked under thighs.
Action: Arch the back, bringing chest and head

up, then flutter kick continuously, moving the legs 8"-10" apart. Kick from hips with knees slightly bent. Count each kick as one.

CIRCULATORY ACTIVITIES

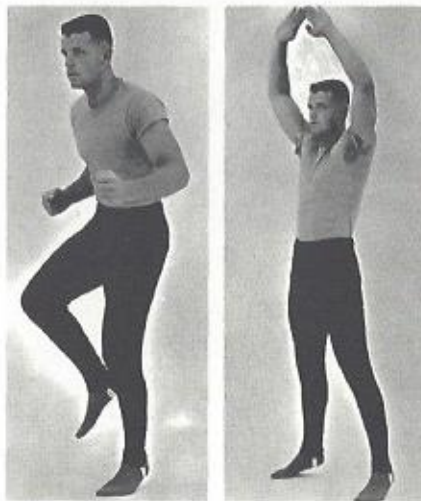
JOG-WALK—Jog and walk alternately for number of paces indicated on chart for distance specified.

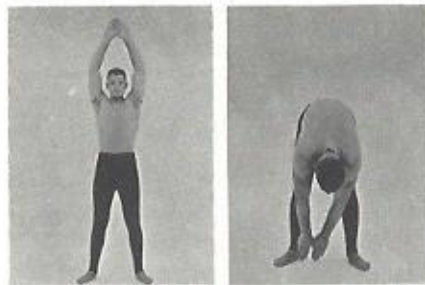
ROPE—Skip or jump rope continuously using any form for 60 seconds and then rest 60 seconds. Repeat 5 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on chart.

STRADDLE HOP—*Starting position:* At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.

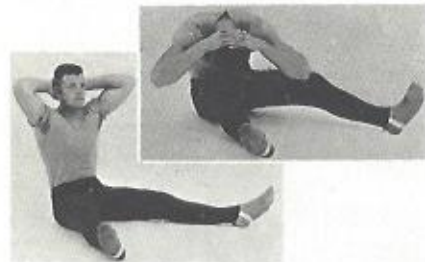




1. TOE TOUCH (TWIST AND BEND)

Starting position: Stand, feet shoulder-width apart, arms extended overhead, thumbs interlocked.

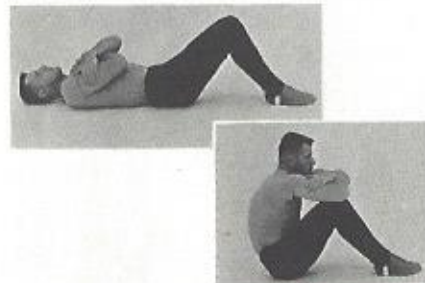
Action: Count 1. Twist trunk to right and touch floor inside right foot with fingers of both hands. Count 2. Touch floor outside toes of right foot. Count 3. Touch floor outside heel of right foot. Count 4. Return to starting position, sweeping trunk and arms upward in a wide arc. On the next four counts, repeat action to left side.



3. SITTING STRETCH (ALTERNATE)

Starting position: Sit, legs spread apart, fingers laced behind neck.

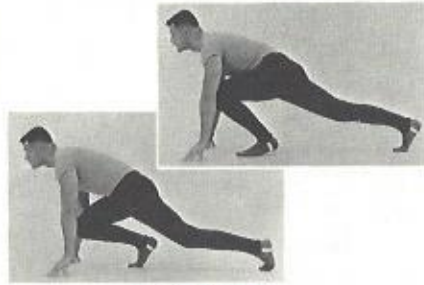
Action: Count 1. Bend forward to left, touching forehead to left knee. Count 2. Return to starting position. Counts 3 and 4. Repeat to right. Score one repetition each time you return to starting position. Knees may be bent if necessary.



5. SITUP (ARMS CROSSED, KNEES BENT)

Starting position: Lie on back, arms crossed on chest, hands grasping opposite shoulders, knees bent to right angle, feet flat on floor.

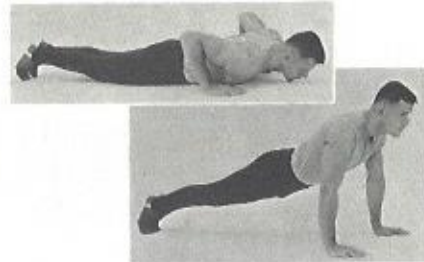
Action: Count 1. Curl up to sitting position. Count 2. Return to starting position.



2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.

Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands, extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.

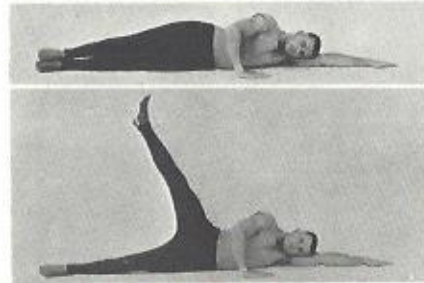


4. PUSHUP

Starting position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.

Action: Count 1. Push body off floor by extending arms, so that weight rests on hands and toes. Count 2. Lower the body until chest touches floor.

Note: Body should be kept straight, buttocks should not be raised, abdomen should not sag.



6. LEG RAISER (WHIP)

Starting position: Right side of body on floor, right arm supporting head.

Action: Whip left leg up and down rapidly, lifting as high as possible off the floor. Count each whip as one. Reverse position and whip right leg up and down.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch (twist and bend).....	20 each side
2. Sprinter.....	28
3. Sitting stretch (alternate).....	24
4. Pushup.....	30
5. Situp (arms crossed, knees bent).....	30
6. Leg raiser (whip).....	20 each leg
7. Prone arch (arms extended).....	20

Circulatory activity (choose one each workout)

Jog.....	1 mile
Rope (skip 90 secs.; rest 30 secs.).....	3 series
Run in place (run 180; hop 25 - 2 cycles).....	5 minutes

Water activities—See recommendations in Section IV.

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)													Prove-out workouts		



7. PRONE ARCH (ARMS EXTENDED)

Starting position: Lie face down, legs straight and together, arms extended to sides at shoulder level.



Action: Count 1. Arch the back, bringing arms chest and head up, and raising legs as high as possible. Count 2. Return to starting position.

CIRCULATORY ACTIVITIES

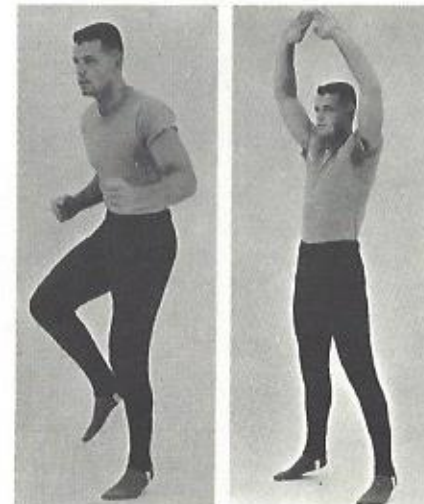
JOG—Jog continuously for 1 mile.

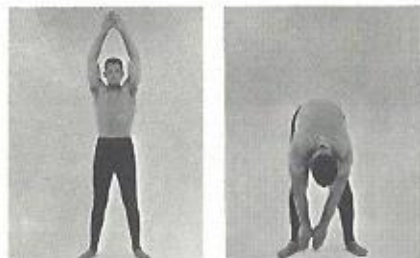
ROPE—Skip or jump rope continuously using any form for 90 seconds and then rest for 30 seconds. Repeat 3 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart, then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping in time specified on chart.

STRADDLE HOP—Starting position: At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.





1. TOE TOUCH (TWIST AND BEND)

Starting position: Stand, feet shoulder-width apart, arms extended over head, thumbs interlocked.

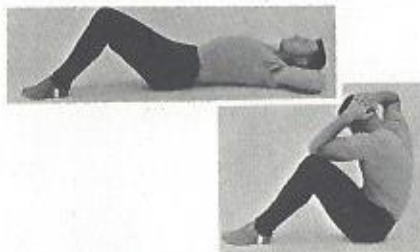
Action: Count 1. Twist trunk to right and touch floor inside right foot with fingers of both hands. Count 2. Touch floor outside toes of right foot. Count 3. Touch floor outside heel of right foot. Count 4. Return to starting position, sweeping trunk and arms upward in a wide arc. On the next four counts, repeat action to left side.



3. SITTING STRETCH (ALTERNATE)

Starting position: Sit, legs spread apart, fingers laced behind neck, elbows back.

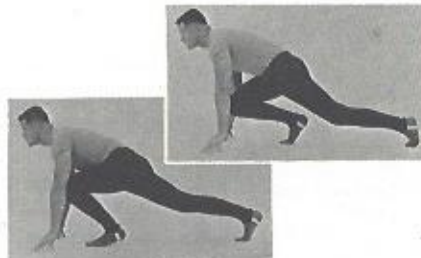
Action: Count 1. Bend forward to left, touching forehead to left knee. Count 2. Return to starting position. Counts 3 and 4. Repeat to right. Score one repetition each time you return to starting position. Knees may be bent if necessary.



5. SITUP (FINGERS LACED, KNEES BENT)

Starting position: Lie on back, fingers laced behind neck, knees bent, feet flat on floor.

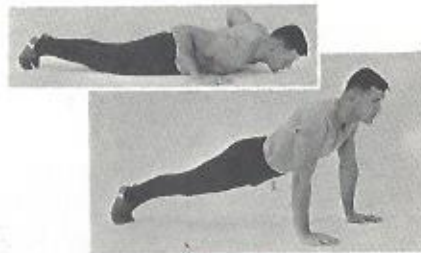
Action: Count 1. Sit up, turn trunk to right, touch left elbow to right knee. Count 2. Return to starting position. Count 3. Sit up, turn trunk to left, touch right elbow to left knee. Count 4. Return to starting position. Score one each time you return to starting position.



2. SPRINTER

Starting position: Squat, hands on floor, fingers pointed forward, left leg fully extended to rear.

Action: Count 1. Reverse position of feet in bouncing movement, bringing left foot to hands and extending right leg backward—all in one motion. Count 2. Reverse feet again, returning to starting position.

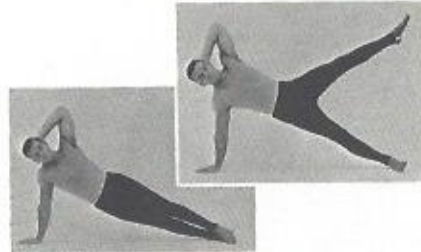


4. PUSHUP

Starting position: Lie on floor, face down, legs together, hands on floor under shoulders with fingers pointing straight ahead.

Action: Count 1. Push body off floor by extending arms so that weight rests on hands and toes. Count 2. Lower body until chest touches floor.

Note: Body should be kept straight, buttocks should not be raised, abdomen should not sag.



6. LEG RAISER (ON EXTENDED ARM)

Starting position: Body rigidly supported by extended right arm and foot. Left arm is held behind head.

Action: Count 1. Raise left leg high. Count 2. Return to starting position slowly. Do required number of repetitions. Repeat on other side.

Warmup Exercises

Exercises 1-6 of Orientation program

Conditioning Exercises

Uninterrupted repetitions

1. Toe touch (twist and bend).....	30 each side
2. Sprinter.....	36
3. Sitting stretch (alternate).....	30
4. Pushup.....	50
5. Situp (fingers laced, knees bent).....	40
6. Leg raiser (on extended arm).....	20 each side
7. Prone arch (fingers laced).....	30

Circulatory activity (choose one each workout)

Jog-run.....	3 miles
Rope (skip 2 mins.; rest 30 secs.).....	3 series
Run in place (run 216, hop 30 - 2 cycles).....	6 minutes

Water activities—See recommendations in Section IV

Your progress record	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Step test (pulse)															
															Prove-out workouts



7. PRONE ARCH (FINGERS LACED)

Starting position: Lie face down, fingers laced behind neck.

Action: Count 1. Arch back, legs, and chest off



floor. Count 2. Extend arms forward. Count 3. Return hands to behind neck. Count 4. Flatten body to floor.

CIRCULATORY ACTIVITIES

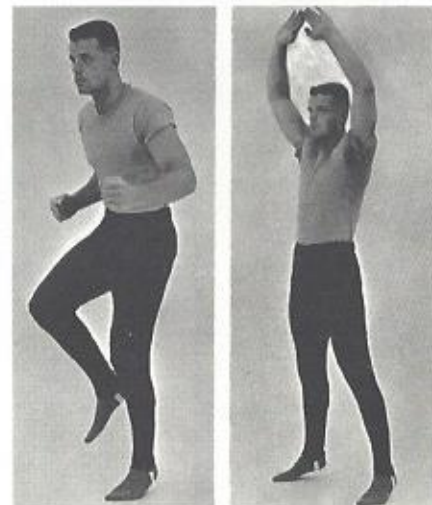
JOG-RUN—Alternately jog and run the specified distance. Attempt to increase the proportion of time spent running in each succeeding workout.

ROPE—Skip or jump rope continuously using any form for 2 minutes and then rest 30 seconds. Repeat 3 times.

RUN IN PLACE—Raise each foot at least 4" off floor and jog in place. Count 1 each time left foot touches floor. Complete number of running steps called for in chart; then do specified number of straddle hops. Complete 2 cycles of alternate running and hopping for time specified on the chart.

STRADDLE HOP—**Starting position:** At attention.

Action: Count 1. Swing arms sideward and upward, touching hands above head (arms straight) while simultaneously moving feet sideward and apart in a single jumping motion. Count 2. Spring back to starting position. Two counts in one hop.



Staying fit

After you reach the level of conditioning you have decided is most suitable for you, you can keep yourself fit by continuing the workouts for that level.

While it has been found possible to maintain fitness with three workouts a week, ideally, exercise should be a daily habit. If you can, by all means continue your workouts on a five-times-a-week basis.

If at any point—either after reaching your goal or in the process of doing so—your workouts are interrupted because of illness or other reason for more than a week, it will be best to begin again at a lower level. If you have had a serious illness or surgery, proceed under your physician's guidance.

Broadening your program

The exercises and activities you have engaged in are basic—designed to take you up the ladder of fitness without need for special equipment or facilities.

There are many other activities which, if you wish, you may use to supplement the basic program. They include:

Isometrics—"exercises without movement"—that require no equipment, can be done quickly (6-8 seconds each), and add to muscular strength.

Water exercises you can use if you have access to a pool.

Sports that help maintain or increase fitness.

You will find a discussion of these—and a guide to their use—in the next section.

Also in that section are suggestions for taking advantage of many daily opportunities for sound physical activity—and pertinent tips on good posture.

SECTION IV

BROADENING YOUR PROGRAM FOR FITNESS

*Daily opportunities for adding
to fitness*

*Isometrics—"exercise without
movement"*

Water activities

Weight training

Sports

*Fitness and posture—improving
each with the other*

DAILY OPPORTUNITIES FOR ADDING TO FITNESS

There are many—and, by taking advantage of them, you can speed your progress to—and more easily maintain—your top level of fitness.

Here are some examples:

Stairs—versus elevator or escalator: At least now and then, choose the stairs. And bound up them—take two at a time as often as possible.

Breaks—along with, or instead of, those midmorning and midafternoon time-outs for coffee, take exercise breaks. No need to get into a sweat. Do a conditioning exercise or two if convenient. If you lack privacy, do some of the inconspicuous isometric exercises.

Pull-ins—suck in your abdomen now and then, hold it taut for a few seconds.

Up for a stretch—if you must work in a static, sitting position, get up occasionally, stand erect, stretch a bit, move around.

Rub away—after a shower or bath, towel yourself vigorously. That's exercise, too—stimulating for muscles as well as skin.

Walk—every chance you get.

Walking deserves special emphasis

Walking is actually one of the best all-round physical activities. The massaging action the leg muscles exert on the veins as you walk improves the flow of blood back to the heart; when you walk you're improving not only your leg muscles but also the pumping action they provide. Walking costs nothing; there are many possible daily opportunities for it, and it can be enjoyable. Develop a brisk step, breathe deeply, swing your arms.

Allow extra time to get to the train, to the store, to meetings, other places you have to go so you can go, at least now and then, by footpower.

Whenever you feel tense and nervous, try a walk—the brisker and longer, the better; but even a brief one will help discharge tension. Use a before-bed walk as an aid to sleep; it can be a big help in overcoming insomnia.

On an occasional weekend, plan walking as a family enterprise. Set a goal; take a walking tour to a park, other scenic spot, or some place of historical interest.

Whenever possible adult men and women should join physical fitness groups conducted under professional supervision. Such classes are available at local clubs, churches, schools, colleges, community recreation centers, and at the Y's and other voluntary agencies.

ISOMETRICS

Isometric contraction exercises take very little time, require no special equipment. They're excellent muscle strengtheners and, as such, valuable supplements.

The idea of isometrics is to work out a muscle by pushing or pulling against an immovable object such as a wall . . . or by pitting it against the opposition of another muscle.

The basis is the "overload" principle of exercise physiology—which holds that a muscle required to perform work beyond the usual intensity will grow in strength. And research has been indicating that one hard, 6- to 8-second isometric contraction per workout can, over a period of six months, produce a significant strength increase in a muscle.

The exercises illustrated and described in the following pages cover major large muscle groups of the body.

They can be performed almost anywhere and at almost any time.

There is no set order for doing them—nor do all have to be completed at one time. You can, if you like, do one or two in the morning, others at various times during the day whenever you have half a minute or even less to spare.

For each contraction, maintain tension *no more than eight seconds*. Do little breathing during a contraction; breathe deeply between contractions.

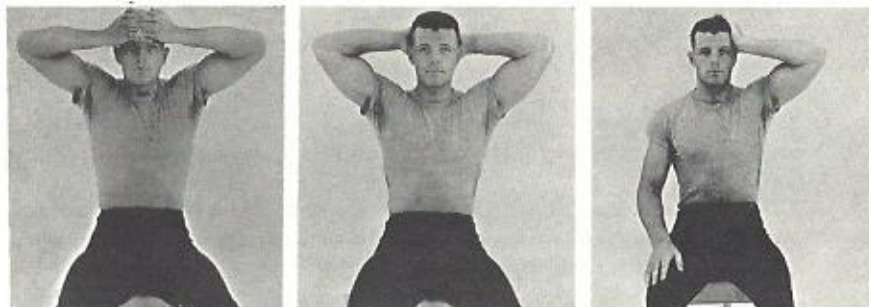
And start easily. Do *not* apply maximum effort in the beginning.

For the first three or four weeks, you should exert only about one-half what you think is your maximum force.

Use the first three or four seconds to build up to this degree of force—and the remaining four or five seconds to hold it.

For the next two weeks, gradually increase force to more nearly approach maximum. After about six weeks, it will be safe to exert maximum effort.

Pain indicates you're applying too much force; reduce the amount immediately. If pain continues to accompany any exercise, discontinue using that exercise for a week or two. Then try it again with about 50 percent of maximum effort and, if no pain occurs, you can go on to gradually build up toward maximum.



NECK

Starting position: Sit or stand, with interlaced fingers of hands on forehead.

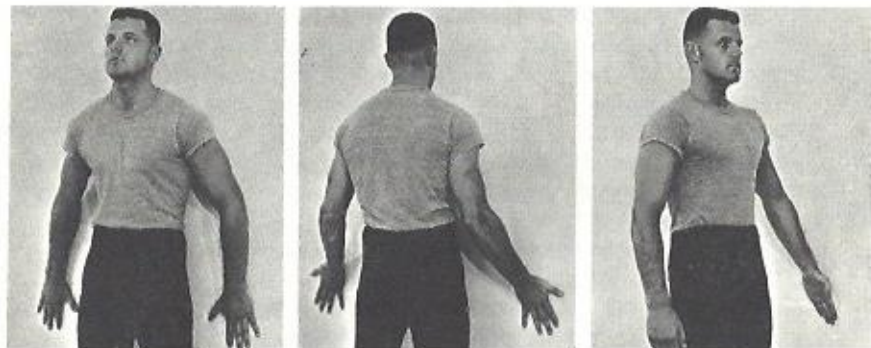
Action: Forcibly exert a forward push of head while resisting equally hard with hands.

Starting position: Sit or stand, with interlaced fingers of hands behind head.

Action: Push head backward while exerting a forward pull with hands.

Starting position: Sit or stand, with palm of left hand on left side of head.

Action: Push with left hand while resisting with head and neck. Reverse using right hand on right side of head.



UPPER BODY

Starting position: Stand, back to wall, hands at sides, palms toward wall.

Action: Press hands backward against wall, keeping arms straight.

Starting position: Stand, facing wall, hands at sides, palms toward wall.

Action: Press hands forward against wall, keeping arms straight.

Starting position: Stand in doorway or with side against wall, arms at sides, palms toward legs.

Action: Press hand(s) outward against wall or doorframe, keeping arms straight.



ARMS

Starting position: Stand with feet slightly apart. Flex right elbow, close to body, palm up. Place left hand over right.

Action: Forcibly attempt to curl right arm upward, while giving equally strong resistance with the left hand. Repeat with left arm.

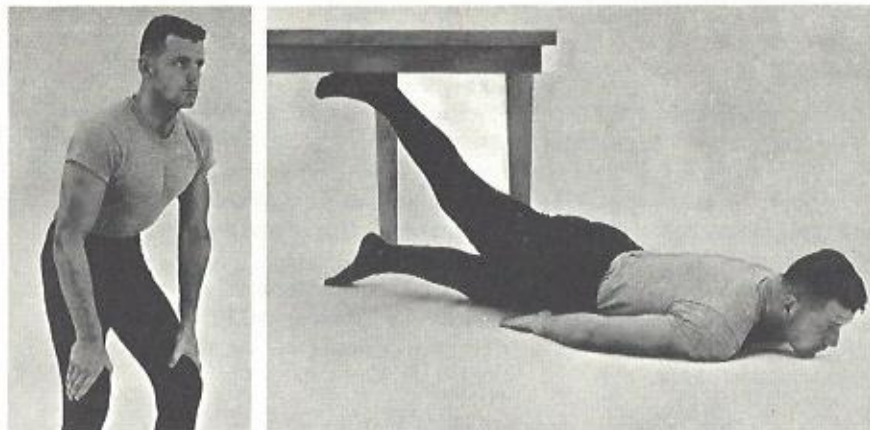
ARMS AND CHEST

Starting position: Stand with feet comfortably spaced, knees slightly bent. Clasp hands, palms together, close to chest.

Action: Press hands together and hold.

Starting position: Stand with feet slightly apart, knees slightly bent. Grip fingers, arms close to chest.

Action: Pull hard and hold.



ABDOMINAL

Starting position: Stand, knees slightly flexed, hands resting on knees.

Action: Contract abdominal muscles.

LOWER BACK, BUTTOCKS AND BACKS OF THIGHS

Starting position: Lie face down, arms at sides, palms up, legs placed under bed or other heavy object.

Action: With both hips flat on floor, raise one leg, keeping knee straight so that heel pushes hard against the resistance above. Repeat with opposite leg.



LEGS

Starting position: Sit in chair with left ankle crossed over right, feet resting on floor, legs bent at 90 degree angle.

Action: Forcibly attempt to straighten right leg while resisting with the left. Repeat with opposite leg.

INNER AND OUTER THIGHS

Starting position: Sit, legs extended with each ankle pressed against the outside of sturdy chair legs.

Action: Keep legs straight and pull toward one another firmly. For outer thigh muscles, place ankles inside chair legs and exert pressure outward.

WATER ACTIVITIES

Swimming is one of the best physical activities for people of all ages—and for many of the handicapped.

With the body submerged in water, blood circulation automatically increases to some extent; pressure of water on the body also helps promote deeper ventilation of the lungs; and with well-planned activity, both circulation and ventilation increase still more.

The water exercises described on the following page can be used either as supplements to, or replacements for, the circulatory activities of the basic program. The goals for each of the five levels are shown in the chart below.

Women

Level	1	2	3	4	5
Bobs.....	10.....	15.....	20.....	50.....	100
Swim.....	5 min...	10 min..	15 min..	.....	.....
Interval swim- ming.	.....	.....	.....	25 yds. (Repeat 10 times.)	25 yds. (Repeat 20 times.)

Men

Level	1	2	3	4	5
Bobs.....	10.....	15.....	25.....	75.....	125
Swim.....	5 min...	10 min..	15 min..	.....	.....
Interval swim- ming.	.....	.....	.....	25 yds. (Repeat 20 times.)	50 yds. (Repeat 20 times.)

BOBBING

Starting position: Face out of water.

Action: Count 1. Take a breath. Count 2. Submerge while exhaling until feet touch bottom. Count 3. Push up from bottom to surface while continuing to exhale. Three counts to one bob.

SWIMMING

Use any type of stroke. Swim continuously for the time specified.

INTERVAL SWIMMING

Use any type of stroke. Swim moderately fast for distance specified. You can then either swim back slowly to starting point or get out of pool and walk back. Repeat specified number of times.



WEIGHT TRAINING

Weight training also is an excellent method of developing muscular strength—and muscular endurance. Where equipment is available, it may be used as a supplement to the seven conditioning exercises.

Because of the great variety of weight training exercises, there will be no attempt to describe them here. Both barbells and weighted dumbbells—complete with instructions—are available at most sporting goods stores. A good rule to follow in deciding the maximum weight you should lift is to select a weight you can lift six times without strain.

SPORTS

Soccer, basketball, handball, squash, ice hockey and other sports that require sustained effort can be valuable aids to building circulatory endurance.

But if you have been sedentary, it's important to pace yourself carefully in such sports, and it may even be advisable to avoid them until you are well along in your physical conditioning program. That doesn't mean you should avoid all sports.

There are many excellent conditioning and circulatory activities in which the amount of exertion is easily controlled and in which you can progress at your own rate. Bicycling is one example. Others include hiking, skating, tennis, running, cross-country skiing, rowing, canoeing, water skiing and skindiving.

You can engage in these sports at any point in the program, if you start slowly. Games should be played with full speed and vigor only when your conditioning permits doing so without undue fatigue.

On days when you get a good workout in sports you can skip part or all of your exercise program. Use your own judgment.

If you have engaged in a sport which exercises the legs and stimulates the heart and lungs—such as skating—you could skip the circulatory activity for that day, but you still should do some of the conditioning and stretching exercises for the upper body. On the other hand, weight-lifting is an excellent conditioning activity, but it should be supplemented with running or one of the other circulatory exercises.

Whatever your favorite sport, you will find your enjoyment enhanced by improved fitness. Every weekend athlete should invest in frequent workouts.

POSTURE

There is a relationship between good posture and physical fitness—one helps the other.

Good posture acts to avoid cramping of internal organs, permits better circulation, prevents undue tensing of some muscles and undue lengthening of others. It thus contributes to fitness.

In turn, physical conditioning, by developing muscle tone, helps to make good posture more readily maintainable—and will help, too, if you have any bad postural habits you need to break.

For good posture, the centers of gravity of many body parts—feet, legs, hips, trunk, shoulders and head—must be in a vertical line. As viewed from the side when you are standing, the line should run through ear lobe, tip of shoulder, middle of hips, just back of kneecap, just in front of outer ankle bone.

Proper posture positions are:



STANDING

1. Feet parallel, about 6" apart.
2. Head high, as if balancing a book.
3. Chest out.
4. Stomach and hips firm.
5. Abdomen and back as flat as possible.
6. Knees very lightly flexed—not stiffly locked.
7. Weight evenly distributed on both feet—most of it on balls of feet.

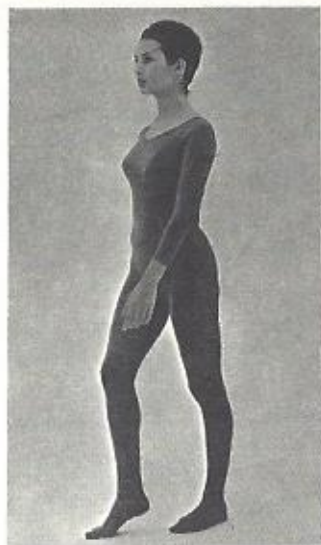


SITTING

1. Sit tall and back, with hips touching the back of the chair, feet flat on floor.
2. Chest out, back of neck nearly in line with upper back.
3. When writing, lean forward from the hips so you keep head and shoulders in line.

WALKING

1. Knees and ankles limber, toes pointed straight ahead. 2. Head and chest high. 3. Swing legs directly forward from hip joints. 4. Push feet off the ground—don't shuffle. 5. Swing shoulders and arms freely and easily.



The position of the hips is one reliable indicator of posture. They should rest squarely upon the legs without tilting forward or backward.

Flabby abdominal muscles and excess weight—particularly in the abdominal region—are frequent causes of poor posture. Weak abdominal muscles permit the internal organs to drop. The results: the abdomen protrudes, the pelvis tilts forward and the curve of the lower back is accentuated. Lower back pains may occur.

The obese person's "paunch" upsets his center of gravity. As it pulls him forward he compensates by leaning backward, bending his knees slightly and increasing the curve of his back.

This produces the characteristic "old man's stance."

Excessive use of high-heeled shoes can produce the same effect in women—even young women. Additionally, the muscles in the calves and the backs of the thighs are shortened, so that it may be uncomfortable to go barefoot or wear low heels.

Forward head, or "poked neck," is another common posture fault. When the head is out of line, some other part of the body compensates and also moves out of line.

Get the "feel" of proper posture positions. Practice them until they become habitual.





U.S. OFFICIAL PHYSICAL FITNESS PROGRAM



"The need for increased attention to physical fitness is clearly established. The Government cannot compel us to act, but freedom demands it. A nation is merely the sum of all its citizens, and its strength, energy and resourcefulness can be no greater than theirs."

John F. Kennedy