

Chapter Thirty-One

Physical Exercise



side from breathing, gymnastics in general—or in the case of illness or deformity, special corrective and curative exercises—should be taken every day.

Physical exercise has similar effects upon the system as hydrotherapy, massage and manipulative treatment. **It stirs up the morbid accumulations in the tissues, stimulates the arterial and venous circulation, expands the lungs to their fullest capacity,** thereby increasing the intake of oxygen, and most effectively **promotes the elimination of waste and morbid materials** through skin, kidneys, bowels and the respiratory tract.

Furthermore, well-adapted, systematic physical exercises tend to correct dislocations of spinal vertebrae and other bony structures. They relax and soften contracted and hardened muscles and ligaments and tone up those tissues which are weakened and abnormally relaxed. Regular physical exercise means increased blood supply, improved nutrition and better drainage for all the vital organs of the body.

By means of systematic exercise, combined with deep breathing, the liberation and distribution of electromagnetic energies in the system are also greatly promoted.

Most persons who have to work hard physically are under the impression that they need not take special exercises. This, however, is a mistake. In nearly all kinds of physical labor only certain parts of the body are called into action and only certain sets of muscles exercised, while others remain inactive. **This favors unequal development,** which is injurious to the organism as a whole. It is most necessary that the ill effects of such one-sided activity be counter-

acted by exercises and movements that bring into active play **all** the different parts of the body, especially those that are neglected during the hours of work.

Systematic physical exercise is an absolute necessity for brain workers and those following sedentary occupations. They not only need breathing gymnastics and corrective movements mornings and evenings, but should take regular daily walks, no matter what the condition of the weather. Unless they do this faithfully, their circulation will become sluggish and their organs of elimination inactive. The cells and tissues of their bodies will gradually become clogged with morbid encumbrances, and this will inevitably lead to physical and mental deterioration.

General Rules

- (a) Weak persons and those suffering from malignant diseases, such as cancer, tuberculosis, heart trouble, asthma, or from displacements and ruptures, or who are liable to apoplectic seizures, etc., should not take these or any other vigorous exercises except under the supervision of a competent physician.
- (b) At least twice a day all parts of the respiratory apparatus should be thoroughly exercised (see Chapter Twenty-Nine on Breathing Exercises). Deep breathing should accompany every corrective movement, whether it be a special breathing exercise or not.
- (c) Begin your exercises each day with light movements and change gradually to more vigorous ones, then reverse the process, ending with light, relaxing movements.
- (d) When beginning to take systematic exercise, do not make the separate movements too vigorous or continue them too long. If any of them cause pain or considerable strain, omit them until the body becomes stronger and more flexible. The muscular soreness often resulting from exercise at the beginning is, as a rule, of little consequence and disappears before long. The different movements should be practiced in spite of it, because that is the only way to relieve and overcome this condition.
- (e) Stop when you begin to feel tired. Never overdo; you should

feel refreshed and relaxed after exercising, not tired and shaky.¹

- (f) Do not take vigorous exercise of any kind within an hour and a half after eating, nor immediately before meals. It is a good plan to rest and relax thoroughly for about fifteen minutes before sitting down to the table.
- (g) Whenever practicable, exercise out of doors. If indoors, perform the movements near an open window or where there is a current of fresh air.
- (h) Exercise undressed, if possible, or in a regular gymnasium suit that gives free play to all the muscles. If dressed, loosen all tight clothing. *Ladies should wear their garments suspended from the shoulders by means of shoulder braces, or so-called reform waists, the skirts being fastened to these.*²
- (i) Always relax physically and mentally before taking exercise.
- (j) Apparatus is not necessary to produce results. However, dumbbells, wands or Indian clubs may be used, but they should not be too heavy. One-pound dumbbells are sufficiently heavy in most cases.³ The exercises described here are intended for muscular control, flexibility, improvement of the circulation and increased activity of the vital functions rather than for mere animal strength.

In the following paragraphs we offer a selection of corrective movements, graduated from the more simple to those requiring considerable agility and effort.

In practicing these exercises, it is best to alternate them, that is, to select, say, six or seven movements, suited to individual condi-

¹ We rarely recommend exercise in our early treatment of chronic fatigue syndrome. As the patient begins to improve, light exercise can be taken but the rule is that if the patient feels more exhausted the next day he did too much. The idea for a CFS patient is to do only that amount of exercise that does not tire him afterward.

² Left in to savor the flavor of 1913. I am certain that today's athletic ladies are pleased that fashion allows them to dress in the same loose togs as the men.

³ Dr. Lindlahr would probably be amused at the panoply of modern exercise equipment. His point of view is still valid, however. The consistency of whatever type of exercise is chosen is still far more important than the equipment employed. We like to think today that we can spend money to avoid effort at exercise. The world does not work that way.

tions with a view to secure all-around general development and special practice for those parts and organs of the body that need extra attention. The time at your disposal will also have to be considered.

Practice these exercises daily for a week. For the following week select six different exercises, then six more for the third week, and so on, supplementing the list here given as may be required by your particular needs. Then start over again in a similar manner.

This is better than doing the same stunts every day. It promotes all-around development of the body and keeps the interest from flagging.

Corrective Gymnastics

- (1) Raise the arms forward (at the same time beginning to inhale), upward above the head, and backward as far as possible, bending back the head and inhaling deeply. Now exhale slowly, at the same time lowering arms and head and bending the body downward until the fingers touch the toes. **Keep the knees straight.** Inhale again, raising arms upward and backward as before. Repeat from six to ten times.

**For exercising the muscles between the ribs
and the abdominal muscles in the back:**

- (2) Inhale slowly and deeply, with arms at side. Now exhale, and at the same time bend to the left as far as possible, raising the right arm straight above the head and **keeping the left arm close to the side of the body.** Assume the original position with a quick movement, at the same time inhaling. Exhale as before, bending to the right and raising the left arm. Repeat a number of times.

**For making the chest flexible. Also
excellent for the digestive organs:**

- (3) **Chest Stretcher:** This exercise must be performed vigorously, the movements following one another in rapid succession: Stand erect. Throw the arms backward so that the palms touch (striving to bring them higher with each repetition), at the same time rising on the toes and inhaling.

Without pausing, throw the arms forward and across the chest, the **right** arm uppermost, striking the back with both hands on opposite sides, at the same time exhaling and lowering the toes. Throw the arms back immediately, touching palms, rising on toes and inhaling as before, then bring them forward and across the chest again, **left** arm uppermost. Repeat from ten to twenty times. An excellent massage and vibratory movement for the lungs.

**Exercises for filling out scrawny
necks and hollow chests:**

- (4) (a) Stand erect. Without raising or lowering the chin **and without bending the neck**, push the head forward as far as possible, then relax. Repeat a number of times. Push the head straight back in similar manner, making an effort to push it farther back each time. Do not bend the neck. Repeat.
- (b) Stand erect. Bend the head toward the right shoulder as far as possible, then relax. **Do not rotate the head.** Repeat. Bend the head to the left shoulder in a similar manner, then alternate the two movements.
- (c) Stand erect. Bend the head **forward** as far as possible, making an effort to bring it down farther each time. Relax. Bend the head **backward** as far as possible. Bend the head first forward, then backward. Repeat.

**For exercising the muscles of the
chest and the upper arm:**

- (5) Stand erect, elbows to sides, hands closed on chest, thumbs inward. Thrust out the arms vigorously and quickly, first straight ahead, then to the sides, then straight up, then straight downward, then backward. Repeat each movement a number of times, then alternate them, each time bringing arms back and hands to the original position quickly and forcefully.
As a variation, raise the elbows sideways to shoulder height with fists on shoulders, then strike vigorously as before, opening the palms and stretching the fingers with each

thrust. Repeat from ten to twenty times or until tired.

- (6) Stand erect, hands on hips. Keeping the legs straight, rotate the trunk upon the hips, bending first forward, then to the right, then backward, then to the left. Repeat a number of times, then rotate in the opposite direction.

Especially valuable to stir up a sluggish liver:

- (7) Lie flat on your back on a bed or, better still, a mat on the floor, hands under head. Without bending knees, raise the right leg as high as possible and lower it slowly. Repeat a number of times, then raise the other leg, then alternate. As the abdomen becomes stronger, raise both legs at once, keeping knees straight. **It is important that the legs be lowered slowly.**

For exercising the abdominal muscles and strengthening the pelvic organs. This and the following exercise are especially valuable for remedying female troubles:

- (8) Lie flat on back, arms folded on chest. Place the feet under a chair or bed to keep them in position. Raise the body to a sitting posture, keeping knees, back and neck straight. Lower the body slowly to its original position. Repeat from five to ten times, according to strength.

Supplementary Exercises

- (9) Stride-stand position (feet about one-half yard apart). Raise the arms sideways until even with the shoulders, then, without bending the back, rotate the trunk upon the hips, first to the right, then to the left.

As a variation of this exercise, rotate from the waist only, keeping the hips motionless.

An excellent massage for the internal organs:

- (10) **See-saw motion:**

Stride-stand position, arms raised sideways. Bend to the right until the hand touches the floor, left arm raised high. Resume original position. Repeat several times, then bend to the left side, then alternate.

- (11) **Chopping exercise:**

Stride-stand position. Clasp the hands above the left shoul-

der. Swing the arms downward and between the legs, bending well forward. Return to position and repeat a number of times, then repeat with hands on right shoulder, then alternate.

(12) **Cradle rock:**

Clasp hands over head, elbows straight. Bend the trunk to the right and left side alternately and without pausing a number of times.

(13) Stand erect, feet together. Jump to the stride-stand position, at the same time raising arms sideways to shoulders, jump back to original position and lower arms. Repeat from ten to twenty times.

(14) Lie flat on back, arms at side, legs straight. Raise both legs **till they are at right angles with body**. From this position sway legs to the right and left side alternately.

(15) Lie flat on back, arms extended over head. Swing arms and legs upward simultaneously, touching the toes with the hands in midair, balancing the body on the hip bones and lower part of spine. Return to original position and repeat.

**This is a difficult and strenuous exercise,
and should not be attempted at first:**

(16) Lie flat on stomach, hands under shoulders, palms downward, fingers turned inward, about six inches apart. This will give free play to the muscles of the chest. Raise the upper half of the body on the hands and arms as high as possible, keeping the body straight. Return to position and repeat until slightly fatigued.

(17) Same position as before. Raise the entire body on hands and toes, keeping arms and legs straight. Return to relaxed position and repeat the exercise.

As a variation, sway forward and backward while in the raised position.

(18) Lie flat on stomach, arms extended in front. Fling the arms upward and raise the upper part of the body as high as possible, **keeping the legs straight**. Return to position and repeat, but avoid excessive strain.

(19) Same position as before, but hands on hips or clasped in back. Raise upper part of body without assistance from

hands or arms.

(20) Rocking chair motion:

Sit on a mat or bed, legs straight, arms at side. Recline so that the upper part of the body almost touches the mat, at the same time swinging the legs upward. Return to original position and repeat without any pause between the movements, rocking back and forth until slightly tired.

As you get stronger, clasp the hands behind the head. As a variation, rock with the knees bent, hands clasped below them.

Special Exercises for Reducing Flesh and Strengthening the Abdominal Organs

- (21)** Lie flat on stomach, heels and toes together, hands stretched out in front. Fling head and arms upward, at the same time raising the legs, knees straight. **Avoid straining.**
- (22)** Same position, hands clasped on back, feet together. Roll from side to side.
- (23)** Lie flat on back, seize a bar (bed rail or rung of chair) just behind the head. Keeping the feet close together, raise the legs as high as possible, then swing them from side to side. As a variation, swing legs in a circle without flexing the knees.
- (24)** Same position. Raise and lower the legs up and down without letting them touch the floor, keeping the knees straight.
- (25)** Lie flat on the back, fold the hands loosely across the stomach. Raise and lower the upper body without quite touching the floor.
- (26)** Stand erect, heels together, arms raised above the head. Bend forward and downward, endeavoring to place the palms of the hands on the floor in front of the body without flexing the knees. Return slowly to original position and repeat.
- (27)** Stand erect, hands on hips. Keeping the body motionless from the hips downward, sway the upper part of the body from side to side and forward and backward, and in a circle to right and left.

- (28) Stand erect, raise the arms above the head. Rotate the trunk upon the hips with extended arms, bending as far as possible in each direction, but avoiding undue strain. These are strenuous movements and should not be carried to excess or performed very long at a time.

Physical Exercises for Invalids

Persons who are very weak and unable to be on their feet for any length of time need not, for this reason, forego the benefits to be derived from systematic physical exercise.

A low chair, with straight or very lightly curved back and no arms, or a rocking chair of similar construction with a wedge placed under the rockers in such a manner as to keep the chair steady at a suitable angle, is well adapted to the practice of a number of corrective movements, such as rotating of hips and waist, forward and sideward bending of the trunk, the various arm and neck exercises, bending and twisting of feet and toes, the internal massage (Exercise Number 12) and "Breathing Exercises to be Taken in Bed," in Chapter Twenty-Nine.



