

THE "KI-MAGI" SYSTEM OF
PHYSIOLOGICAL
EXERCISES

COPYRIGHTED 1902

ISSUED BY THE
COLUMBIA SCIENTIFIC ACADEMY
1931 BROADWAY ❀ ❀ NEW YORK CITY

THE "KI-MAGI" SYSTEM

...OF...

PHYSIOLOGICAL EXERCISES

Matter is an outward and visible sign of an inward and spiritual force which is mind, and as such, is entirely under the control of each individual, whomever he may be. Yet, at the same time, if a person exercises thoroughly the muscles of his body, the mind will be reacted upon and so will become healthy. "A sound mind in a sound body" is an axiom which, if thoroughly carried out, will produce a perfect individual.

Rapid physical development depends upon two things: first, a system of exercises taken with the muscles tense; second, the proper use of the mind in connection with physical exercises. Most excellent results can be obtained by a system of physical exercises without the muscles being tense, but the results cannot be attained so quickly. Five-minute exercises with the muscles in a tense condition will, so far as health is concerned, produce greater results than thirty-minute exercises with the muscles in a relaxed condition. By taking a system of physical exercises with the muscles tense you at once force the millions of nerve cells in the body to contract, thus forcing out all impurities; and this should be the aim of every system of physical culture. Our life and health depend upon a process of growth and decay. New cells are formed in our bodies, old ones pass away; worn out material must be eliminated from our system to give place for new material and for new cells. If the worn out material is allowed to accumulate our system becomes clogged, the same as if a dam is put across a river, or, if a water pipe should be filled with rocks and dirt; as the dam in the river and the rocks and dirt in the water pipe stop the flow of water, so the worn out material in the system interferes with the circulation of the blood and the nerve force and, if not eliminated, disease and sickness are the inevitable results.

Heavy weights produce physical development, but they check the circulation in the capillaries, which increases the pressure in

the arteries, causing a strain on the heart. Our system of Physical Culture produces the same effect obtained by weights so far as physical development is concerned, but it does not injure the heart; inasmuch as the exercises consist of an alternate contraction and relaxation of the muscles. It is impossible to obtain any benefit from physical exercise unless it is taken in some vigorous form. A few sleepy movements twice a day will never develop you physically or mentally.

In connection with this work we have introduced the celebrated East India method of deep breathing exercises which is productive of the highest results and can be attained by any child, man or woman without the slightest effort. These exercises alone will give you wonderful power and endurance, and if you will master these exercises they will be worth to you hundreds and thousands of dollars. They will preserve your health and build up your strength to an astonishing degree.

One of the first principles of our system is correct thinking. Not one person out of a hundred knows how to concentrate his thoughts so as to produce the proper effects. The average individual expects to attain results from physical exercises in a mechanical way without the use of his mind, yet this is absolutely an impossibility. It is utterly impossible for you to accomplish the highest results with any system of mechanical exercises unless the mind is used in connection with them. Five minute exercises of the right kind, with the mind acting in connection with the physical efforts, is worth more than four hour exercises taken in a mechanical sort of way. No matter what your opinion may be, we wish you to give our system a practical test. If you have previously studied physical culture, lay aside your system only for thirty days, take up the "Ki-Magi" Course for that length of time, and you will be astonished and mystified at the wonderful improvement and the wonderful superiority of our system over any and all others.

In taking our exercises the first thing to do is to determine what portion of the body you wish to develop; select a series of exercises that are especially adapted to the development of that portion of the body, and as you use the exercises repeat mentally to yourself, "My arm shall be strong." In place of the arm, substitute the name of any other portion of the body, and as you are taking the exercises keep your mind centered on that part. Do not let your mind wander from your work for one instant; the moment you feel tired, rest a few minutes. If you have weak lungs and you desire to strengthen them, repeat to yourself mentally the following words while taking the exercises: "My lungs shall be strong, they are getting stronger each day; I have no disease; I shall never contract any disease of the lungs."

HOW TO BREATHE CORRECTLY—THE EAST INDIA METHOD

Very few people understand how to breathe correctly. The adepts of India have developed their breathing powers to such a degree that they are able to turn round and round repeatedly in a circle hundreds of times without becoming dizzy in the slightest degree; they turn so rapidly that the by-standers become dizzy in following their movements. The secret of their work is proper breathing. The natural and right way to breathe, whether standing, sitting, walking or in whatever position the body may be, is to pay no attention to the chest, but watch the abdomen. When you are taking a long breath the abdomen expands first, then the lungs or chest. You can be absolutely convinced of this by lying down flat on your back and taking a long breath. You will notice that without any effort on your part, your abdomen will dilate when inhaling and contract when exhaling the breath. In a minute one should take from six to ten breaths, if in a normal condition. Always bear in mind that you should breathe through the nose and not through the mouth. In taking the breathing exercises it is important that the lungs be filled to their utmost capacity; then hold the breath for a few seconds, then exhale slowly. Always give your breathing much attention and send it through your body with the thought of *strength, vigor and health*. Remember that "the stomach and the liver must be churned with every breath from birth to death."

HOW TO TAKE THE EXERCISES

The exercises of this system should be taken twice a day, if possible; in the morning when you awaken and at night before retiring. Careful attention must be given to the air in the room in which you exercise; the room should be well ventilated before you begin and the windows should be open at the top and bottom fully a foot, while you are exercising, so that the air will circulate. Remember that each person in a room throws off at every respiration about twenty cubic inches of impure air. The purer the air is the quicker you will be able to accomplish what you desire. Pure blood can only come from inhaling pure air. Oxygen is the greatest purifier of impure blood known to man. It is worth more than all the blood purifiers and medicines that have ever been discovered. Nature has provided a way by which you may purify your blood, if you will but follow her laws and breathe correctly.

During the exercises the body should be lightly clad, free from any close-fitting garment. From four to eight minutes should be devoted to the exercises both night and morning. It is highly important that you do not skip a single period, take the exercises twice every day. If this is persisted in it will become a

habit, and you will find if you miss a day's exercise you will miss it as much as your breakfast, and will not feel up to your usual work. Even if you should be ill, there are a portion of the exercises that you can take.

Before you take up the regular exercises you would do well to devote ten minutes twice a day for three or four days to the first eight exercises, as these will enable you to acquire correct habits of breathing and accustom you to easy and well balanced postures of the body, make you erect, yet you will be free from rigidity and constraint. Until you can unstiffen and relax the joints and their connecting muscles and tissues you can only at the risk of injury proceed with all the exercises. After three or four days you can go on with the regular exercises. It is not necessary to take all the exercises given in this course at one period, but select those you may need most and take them for several days; after which you may take others and drop some of those that you have previously been taking. Breathing exercises should be taken every day, no matter what other exercises you are using.

No one exercise should be prolonged beyond the point when the muscles tire. You must expect, however, to be lame and sore when you first begin to exercise, but the best way to cure the lame muscles is to keep on exercising them regularly. You must put your mind into the work so that the muscles may feel the strain and receive the full benefit of the toning up and building process. Too much stress cannot be put upon this point, as it is the basis upon which all successful physical development rests. There must be a concentration of will power upon each exercise.

Immediately after exercising it is advisable to take a cold sponge bath, taking care to bathe the head and breast first with the cold water; then the rest of the body; after which rub down thoroughly with a rough bath towel. The bath should be made ready beforehand and if the heart is all right and the breathing regular, it may be taken even when heated, though it would be well to let a minute elapse after the exercises before taking the bath, being careful, however, not to get chilled.

Before you begin the exercises, in order to mark the gain in your development, you should set down the date at which you commence to practice and take your height, weight, and the measurements of your chest (normal, relaxed and expanded), neck, shoulders, forearm, upper arm, waist, thigh and calf. Then at regular intervals afterwards register the increase you have gained and you will find that the result will encourage you to continue. The height should be taken without shoes and the weight in one's usual exercising attire, and at each time when you take the measurements be sure to have on the same attire.

Rest and cessation from work should, for a time, always succeed a meal; therefore, never take your exercises immediately after eating.

IMPORTANT GENERAL INFORMATION

1. Keep your mind at all times on good health; make up your mind that you are strong and vigorous; that you will not have disease; do not allow yourself to become melancholy. Correct thinking will do more than any other one thing toward keeping your body and mind in first-class condition.

2. It is not necessary that you should devote several hours per day to running and jumping, rowing, etc., to keep in good health. A few simple exercises taken properly, in connection with certain mental suggestions, will do more for the preservation of your health than hours devoted to such exercises as are ordinarily taken in the gymnasium. This course of instruction contains all the exercises that you need to keep your body and mind in proper condition.

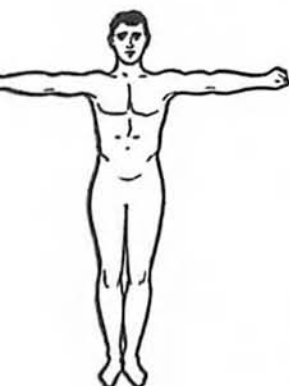
3. Upon rising in the morning drink a glass of cold water before taking the exercises. If your health is not good you should drink during the day at least three quarts of water. The water should be taken between meals. If you are in good health you should drink not less than two quarts of water per day, and three quarts is better. The majority of people do not drink enough water. Water is a great blood purifier. It is nature's way of eliminating effete products. A drink of cold water taken on going to bed and another on arising are conducive to health, especially in the case of persons troubled with constipation.

4. If you are subject to dyspepsia put your feet into cold water for five seconds twice a day; dry them and cover them very quickly. Do not do this just before nor just after meals. This is also a good treatment for cold feet, only it should then be done the first thing in the morning and at night.

I.

BREATHING EXERCISES FOR STRENGTHENING THE LUNGS

First position: The heels should be in line and close together, the knees held well back and the toes turned out at an angle of about 60 degrees. The body straight and inclined forward, so that your weight falls on the arch of the instep, supported by the toes and only lightly on the heels. The arms should hang tensely from the shoulders. The hips should be a little drawn back, the chest advanced, the shoulders square, the head erect, the chin slightly drawn in and the eye looking straight to the front. In each hand tightly clasp a hard rubber ball as this aids in keeping the muscles rigid. In the event that you have no rubber balls, simply close the hands tight, so that the muscles become perfectly tense. Lift the arms until they are parallel with the shoulder, hold the hands so they are facing downward. Make all the muscles of the body as rigid as possible. Dilate the abdomen, taking a long breath and holding it for a few seconds, then exhale by contracting the abdomen as much as possible. Repeat this two times, first with the hands facing downward, then upward, then downward, then upward. Then relax your muscles and drop your arms parallel with the body.



While taking this breathing exercise repeat the following words mentally:—"My lungs are strong, they are getting stronger every day; I feel well; I have great strength and vitality." Repeat these words over and over all the time that you are taking the exercises. Do not for one minute permit your mind to wander. Should you have any disease of the lungs, such as consumption, for instance, repeat the following words mentally while taking the exercises:—"I shall soon be well; I shall get stronger every day; my health is improving; my lungs shall become strong; I have no disease; I am entirely well." If you are sick the exercises can be taken lying down with the muscles relaxed.

If at any time you feel tired, stop for a few seconds; then continue the exercises with your mind firmly centered upon the results that you desire to accomplish.

II.

EXERCISE FOR CURING INDIGESTION AND STRENGTHENING THE STOMACH

Take position as given in exercise No. 1, a hard rubber ball in each hand, the hands facing outward. Both upper and lower limbs should be perfectly rigid. Dilate the abdomen and inhale as much air as possible; hold the breath tight and while holding

the breath contract and dilate the abdomen slowly but forcibly ten or twelve times; then exhale by contracting the abdomen. In contracting and dilating the abdomen, while you are holding the breath, the abdomen moves in and out. It may take a little practice before you can get this motion, but if you will take this exercise regularly in connection with the suggestion which follows, you will never need pepsin nor drugs of any kind to help you digest your food.

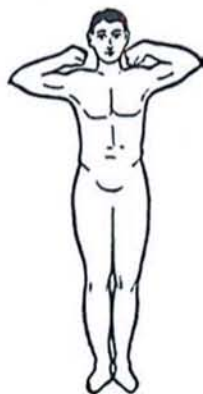
While taking the above exercise repeat the following words mentally: "My digestive organs are strong; my food will digest well; the blood circulates freely in my stomach; I shall never have indigestion." If you are subject to dyspepsia repeat the following words mentally: "The blood circulates freely in my stomach; my stomach feels warm; my food will digest well; I have no disease; I feel well every way; my dyspepsia is entirely cured."

It is a matter of the greatest importance that you should take these exercises with all the force and energy that you can command; keep your mind firmly centered on what you are doing. If you go through the exercises in a half-hearted, mechanical sort of way, you cannot expect to accomplish the greatest possible results. It is better for you to take these exercises for one minute with your mind centered on what you are doing, using all the force and energy at your command, than it would be for you to devote one hour to their practice in a half-hearted, perfunctory kind of way. If you have any disease, make up your mind that you are going to be well; that these exercises will cure you. Keep your mind upon this point all the time that you are taking the exercises and you will positively gain strength day by day.

III.

BREATHING EXERCISE FOR DEVELOPING THE LUNGS AND STRENGTHENING THE BACK

Take position as shown in exercise No. 1, with your arms at right angles with the body, hands facing upward, the hard rubber balls clasped in each hand. The muscles of the arms should be perfectly rigid; then bend the arms at the elbows towards the head, until the joints of the fingers touch the shoulders. Then return the hands to position without relaxing the muscles. As you are bringing the hands toward the shoulders slowly inhale so that the lungs are filled with air to the utmost capacity as the hands



touch the shoulders, then exhale as you return the hands to position. Repeat this exercise three times.

It is highly important that you should grasp the rubber balls as tightly as possible; do not allow the muscles to become relaxed for one instant; put all the force and energy that you can command into your work. While taking the exercises repeat mentally the suggestions in Exercise No. I.

IV.

EXERCISE FOR STRENGTHENING THE MUSCLES OF THE SHOULDERS, BACK AND SPINE



Take 1st position, with arms parallel with the body, firmly clasp a rubber ball in each hand, making muscles perfectly tense; bring the right hand upward from the hip to the shoulder so that the hand stops on a line with the shoulder. As you bring the hand upward slowly inhale so that the lungs are filled to the utmost capacity when the hand reaches the shoulder. Then bring the hand back to position, keeping the muscles perfectly rigid and exhale as the hand returns to position. Then take the same exercise with the left hand. Repeat this exercise three times for each hand.

While taking this exercise repeat mentally the following: "My back is strong; I feel well; I have no disease; I will not contract a disease of any kind. My nerves are steady; my nerve force is strong."

IMPORTANT

Chemical analysis shows that the nerve force or vital essence of life becomes congested and is a jelly-like substance after death; in a sick person the nerve force becomes thickened, while in a well person the nerve force flows freely—being a perfect liquid. If you will take these exercises with all the force and energy that you can command, keeping the muscles of the body perfectly tense,

with your mind centered on what you are doing, you will force all impurities from the nerve cells; you will keep the nerve force in its natural condition. You will develop your magnetic powers to a wonderful degree, so that it will be practically impossible for disease to attack you. You can develop a constitution that will enable you even to resist most contagious diseases. Should a person be so ill that he is unable to take all the exercises, he can take the breathing exercises, and while taking them repeat mentally the suggestions contained herein for building up the health and for the treatment of disease. Also, some well person should give him magnetic treatment according to the instructions contained in our course on Magnetic Healing. Remember at all times that animal electricity or magnetism is the life of the body. When the animal electricity, or nerve force, becomes depleted, disease is the inevitable result. The exercises prepared herein are arranged especially for developing nerve force. With proper nerve force, with the nerves filled with the vital essence of life, disease cannot exist.

V.

EXERCISE FOR STRENGTHENING THE HIPS, BACK AND KIDNEYS

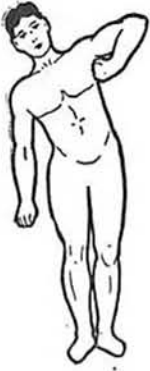
Take first position, arms parallel with the body, hands facing forward, tightly clasping rubber balls; make the muscles of the arms and legs perfectly tense or rigid. Now lift the right foot straight up two or three inches from the floor by a strong contraction just above the hip; do not bend the leg at the knee nor move the foot sideways. Put the foot down again and repeat with the left foot, then with the right foot, then the left, taking four exercises for each foot. Make the strongest possible contraction of the muscles which lift the leg each time, do not sway the body forward or from side to side. No breathing exercise is to be taken with this movement.

While taking the above exercise repeat mentally the following: "My back is strong; I shall never have disease of the kidneys; I feel well in every way." If you have kidney disease or a weak back repeat the following: "The blood circulates freely in my back, it feels warm; I have no disease of the kidneys, my back feels strong; I am feeling better each day—I am entirely well."



VI.

EXERCISE FOR DEVELOPING THE MUSCLES BELOW THE WAIST



Take first position, chest forward, arms downward in line with body, palms turned towards hips, bend the body to right and left alternately, using hips as a pivot. When bending to the left, raise the hand until finger tips fall in arm-pits and vice versa. This movement should be made with the muscles of the body relaxed. Repeat four times.

While taking this exercise repeat the suggestions given in Exercise IV.

VII.

EXERCISE FOR DEVELOPING THE LEGS AND IMPROVING THE DIGESTION



Take position in Exercise No. 1, bend forward from the hips until the upper part of the body is at right angles with your legs, your arms hanging downward; without changing position of body below hips, especially your hips and knees, and with all the muscles relaxed, swing arms squarely upward with object of having backs of hands meet over your shoulders. Repeat four times.

While taking this exercise repeat the suggestions given in No. IV.

VIII.

EXERCISE FOR GENERAL DEVELOPMENT



Lie on your back at full length on floor with your arms folded across your chest, without bending knees or raising heels from floor, lift head slowly about 16 or 18 inches from the floor, return to position and repeat four times.

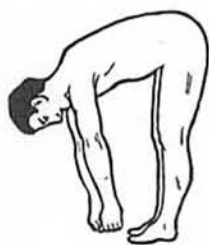
While taking this exercise repeat mentally the suggestion given in Exercise No. IV.

from the floor, keeping the knee perfectly rigid, twist the right leg on itself from hip joint as far to the left as possible, then bring it around as far as possible to the right. The whole weight of the body being on the left foot. Do not allow the body to sway and keep the foot you are turning clear from the floor. Then stand on the right foot and raise the left foot and perform the same exercise which you have previously performed with the right foot. Repeat this exercise eight times with each leg alternately.

While taking this exercise repeat the following mentally:—
“I am perfectly well; I shall get stronger each day; I feel well in every way.”

XII.

EXERCISE FOR STRENGTHENING THE HIPS, LEGS AND LOWER PART OF THE BODY



Take first position, with a rubber ball clasped tightly in each hand, arms parallel with the body, the muscles of the upper part of the body relaxed; make the muscles of the legs perfectly rigid and do not allow the legs to bend at the knees; bring the arms forward until they are extended at full length over the head, and then with a forward movement, not bending the knees, try to touch your toes with your hand. Then return to first position. Repeat eight times.

While taking this exercise repeat the following words mentally:—“I am well and strong; I have no disease; my blood circulates well; I shall sleep well; my food will digest well.”

XIII.

EXERCISE FOR DEVELOPING AND STRENGTHENING THE ARMS LEGS AND STOMACH



Take a horizontal position with palms of hands and the toes resting on the floor, then slowly lower your body until your chin touches the floor, then return to position. Repeat this exercise eight times.

While taking this exercise repeat the suggestions given in Exercise XI.

XIV.

EXERCISE FOR DEVELOPING THE LEGS AND LOWER PART OF THE BODY

Lie on your back at full length on the floor, with your arms under your head, then using your hips as a pivot, slowly raise feet without bending knees until they come at a right angle with your body. Return to position and repeat the exercise eight times.

While taking this exercise repeat mentally the suggestions given in Exercise No. IX.



XV.

EXERCISE FOR DEVELOPING THE ANKLES, CALVES OF THE LEGS AND KNEES

Take position given in Exercise No. 1, chest thrown forward, arms parallel with the body, hands tightly clasping rubber balls. Then drop the body downward as nearly as possible to the floor, using your knees as a pivot, then return to first position and repeat eight times.

While taking this exercise repeat mentally the following suggestions: "I am well and strong and I have great vitality. Disease cannot attack me."



XVI.

EXERCISE FOR CORRECT BREATHING AND FOR STRENGTHENING THE STOMACH, LIVER AND KIDNEYS

Lie flat on back with hands under your head, all the muscles of the body rigid, take a deep breath, not too rapidly, expanding the lungs to the fullest extent, then exhale until the lungs feel



XVIII.

EXERCISE FOR STRENGTHENING THE SHOULDER-JOINTS AND THE MUSCLES OF THE CHEST AND NECK.

Take first position, keep the shoulders perfectly square, the body erect, the arms hanging close to the side, the hands firmly grasping the rubber balls; move the head slowly backward and forward from side to side, then roll it round to the right and left as far as possible. With eyes to the front, now raise and depress the shoulder-blades and arms as in shrugging the shoulders; after which elevate the arms at full length and in line with the body and rotate them in both directions until the muscles are tired. Repeat this exercise five times.



XIX.

EXERCISE TO ASSIST THE CIRCULATION OF BLOOD, STIMULATE THE ORGANS OF THE CHEST AND ABDOMEN, STRENGTHEN THE MUSCLES OF THE TRUNK AND TO MAKE THE HIP-JOINTS PLIABLE

Take first position, rubber ball tightly clasped in each hand, then twist the body on its hip-axis alternately to the left and right, keeping the back and legs straight during the movement; then sway the trunk on the hips from side to side, bending sideways as far as may be comfortable; after which, bend the body backwards, taking care to keep the legs straight, the chest pressed out and the head undrooped. Repeat this exercise five times.

XX.

EXERCISE FOR LOOSENING THE ANKLE JOINTS AND TO GIVE STRENGTH TO THE MUSCLES OF THE CALF

Take first position, then alternately throw the weight of the body on the toes and heels, keeping the body upright and well balanced. Repeat this exercise eight times.



XXI.

EXERCISE TO STRENGTHEN THE MUSCLES OF THE FOREARM AND WRIST, ADD POWER TO THE HAND AND FIRMNESS TO THE GRASP

Take first position, rubber ball tightly clasped in each hand, arms extended at right angles to the body, then bend the hands inward and outward upon the wrist and rotating or turning them round five times. This should be performed with the left and right hand alternately, then both hands should be exercised simultaneously. Repeat this exercise five times for each movement.

XXII.

EXERCISE FOR THOSE HAVING A TENDENCY TO BE FAT

Lie flat on the back on the floor at full length, the arms close by the sides; then alternately raise the body on the hip joints from the prone to the sitting position and slowly lower it again to the horizontal position; repeat the movement six times. A deep breath should be taken before raising the body, and exhaled in lowering it.



After practicing this exercise a few days, the pupil can, when in the prone position, raise the arms and stretch them back over the head and then go through the trunk, raising and lowering movements as above described. In raising the body to the sitting position, it should also be bent forward as far as possible.

This exercise increases the blood circulation, absorbing the fatty deposits, and is not favorable to fatty formation.



XXIII.

EXERCISE FOR STOMACH AND LIVER TROUBLE

Take first position, then slowly bend the trunk outwards on the hip-joints, alternately to the left and right, the hand slightly pressing the outer side of the thigh, and slipping down until it

XXI.

EXERCISE TO STRENGTHEN THE MUSCLES OF THE FOREARM AND WRIST, ADD POWER TO THE HAND AND FIRMNESS TO THE GRASP

Take first position, rubber ball tightly clasped in each hand, arms extended at right angles to the body, then bend the hands inward and outward upon the wrist and rotating or turning them round five times. This should be performed with the left and right hand alternately, then both hands should be exercised simultaneously. Repeat this exercise five times for each movement.

XXII.

EXERCISE FOR THOSE HAVING A TENDENCY TO BE FAT

Lie flat on the back on the floor at full length, the arms close by the sides; then alternately raise the body on the hip joints from the prone to the sitting position and slowly lower it again to the horizontal position; repeat the movement six times. A deep breath should be taken before raising the body, and exhaled in lowering it.

After practicing this exercise a few days, the pupil can, when in the prone position, raise the arms and stretch them back over the head and then go through the trunk, raising and lowering movements as above described. In raising the body to the sitting position, it should also be bent forward as far as possible.

This exercise increases the blood circulation, absorbing the fatty deposits, and is not favorable to fatty formation.

XXIII.

EXERCISE FOR STOMACH AND LIVER TROUBLE

Take first position, then slowly bend the trunk outwards on the hip-joints, alternately to the left and right, the hand slightly pressing the outer side of the thigh, and slipping down until it



reaches the bend of the knee. When one hand touches the side of the knee, the other hand should be raised to the waist. This exercise should be taken while standing on the toes.

This exercise is very beneficial for those suffering with stomach and liver trouble, as it increases the blood circulation, chiefly along the feeding veins of the stomach and the liver. It also gives flexibility to the backbone.

XXIV.

EXERCISE FOR THOSE SUFFERING FROM CONSTIPATION

Take first position, all the muscles of the body tense, then clinch the right fist hard and with the fingers toward the body rub a circle around the outside of the abdomen, over the colon, in the direction the food passes. Begin at the right groin, circle up the right side, then across the center of the body, down the left side and back across the body to the place of starting. Then repeat the same movement in the same direction with the left fist. Repeat this exercise ten times with each hand.



XXV.

EXERCISE FOR TRUNK AND CIRCULATION

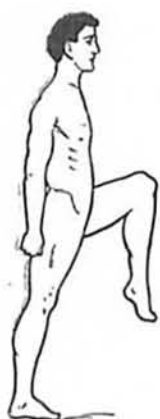
Sit on the floor and draw both knees up and clasp one hand under each knee (see illustration c), then curving the back slightly, stiffen the hip-joints and rock backwards and forwards each time till the neck strikes the floor (see illustration d). After learning the exercise this way, do the same with the hands pressed against the abdomen, keep the limbs and body in the same position. Repeat ten times.



XXVI.

EXERCISE FOR THE LEGS

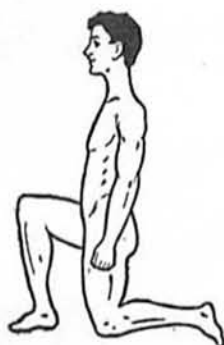
Take first position, the arms and upper part of the body perfectly tense, then rest the weight on the right foot, then raise the left knee as high as you can and strike the chest with the knee without bending the body forward; then stand with the weight of the body on the left foot and bring the right knee up. Repeat this exercise ten times.



XXVII.

EXERCISE FOR THE LEG

Take first position, all the muscles of the body tense, then bend one knee forward sufficiently to touch the other knee to the floor and quickly spring up again. Repeat this exercise ten times with each knee.



XXVIII.

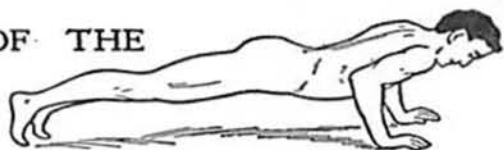
RUNNING EXERCISE

Take first position, then lift the arms with the rubber ball tightly clasped in each hand, place the fists just below the chest, then take a still run; that is, instead of going forward bring the feet right down in the same spot each time. Take fifty steps.



XXIX

EXERCISE TO STRENGTHEN MUSCLES OF THE LEGS AND ARMS



Lie flat on your face, then raise the body on the toes and hands so as to support your weight without touching the abdomen to the floor, then walk round and round the room on all fours, feet and hands. Take twenty steps.

XXX.

EXERCISE FOR THE ARMS AND SHOULDERS

Take first position, the chin drawn in, then clinch the fists and bring them up over the chest and strike hard straight forward with both fists at once. Repeat ten times.

This exercise is fine for the circulation, and after practicing the other exercises it is a good one with which to end your exercises.



XXXI.

EXERCISE FOR THE WRIST

Take first position, every muscle perfectly tense, then with both fists at the chest grip and relax the fists as hard as possible, ten to twenty times. Close this exercise by rubbing the palms together very hard for several seconds, or by letting your arms hang at your sides, then bend your wrists backwards and forwards as far as you can.

XXXII.

EXERCISE FOR THE MUSCLES OF THE NECK

Take first position, hold the shoulders stationary and turn the face first to the right and then to the left as far as possible. Repeat ten times.

XXXIII.

EXERCISE FOR NEURALGIA, AND HEADACHES

Take first position, holding the shoulders stationary, describe a small circle with the top of the head, first around one direction and then in the other. Repeat this ten times.

SPECIAL DIRECTIONS

It is not essential, nor indeed it is not expected that you take the entire thirty-three exercises twice per day. Select a number of those that you need to take most, then vary the exercises slightly from day to day.

The above list of exercises has been selected with the greatest care. It would have been far easier to have given one hundred exercises, or indeed two hundred, than it is to give thirty-three. For, if we had given 200 we would not have had to be so careful in making a selection, but if the course contained two hundred exercises, very few people would have time to take them; it would also be difficult for you to select those that fitted your case, so after much labor and study we succeeded in selecting thirty-three exercises which will develop and strengthen all the muscles and organs of the body. Remember in taking a course in Physical Culture it is not the large number of exercises you take, but the kind of exercises. It is quality not quantity that counts. Four minutes per day devoted to the right kind of exercises, with your mind centered on your work, is worth four hours a day devoted to the wrong kind of exercises in a perfunctory sort of way.

Inasmuch as walking develops the lower part of the body to considerable extent, we have purposely arranged the majority of our exercises to develop the upper part of the body, or those organs and muscles which are not developed by walking.

The disuse of the arms has a bearing on the general health of both men and women, since it is shown that the development of the muscles of the arms increases the capacity of the chest, and with it a corresponding increase in the tissues of the lungs and a greater area is then given for the oxidation of the blood, so essential to perfect health. Physical exercise controls the nervous system and even the temperament of a person. According to the regularity of the nervous system so are the moods; if both are kept in a normal condition we are happy. Develop your muscular system by proper means, and it is as plain as that night follows the day, that your nerve power will be increased.

If you want to be cured of any of the diseases mentioned

below, give special attention to the exercises indicated

by figures opposite the name of the disease

- Bad Circulation—Exercises Nos. 1, 2, 5, 6, 7, 8, 14, 15, 16, 19, 25.
Biliousness—Exercises Nos. 2, 5, 11, 12, 15, 19.
Bright's Disease—Exercises Nos. 2, 5, 10, 11, 14, 15, 23, 33.
Cold Feet and Hands—Exercises Nos. 1, 5, 11, 10, 7, 14, 15, 19.
Colds—Exercises Nos. 1, 10, 9, 16, 23.
Catarrh—Exercises Nos. 1, 10, 16, 22, 23.
Constipation—Exercises Nos. 2, 5, 11, 10, 15, 24, 26.
Consumption—Exercises Nos. 1, 2, 3, 7, 15, 16, 23, 33.
Dysentery—Exercises Nos. 2, 5, 11, 10, 15.
Dyspepsia—Exercises Nos. 2, 11, 12, 10, 15, 16, 17.
Diabetes—Exercises Nos. 2, 5, 11, 10, 14, 16.
Female Weakness—Exercises Nos. 5, 11, 10, 7, 15, 27.
Hysteria—Exercises Nos. 11, 10, 7, 15, 16.
Headaches—Exercises Nos. 10, 6, 8, 16, 32, 33.
Heart Disease—Exercises Nos. 1, 10, 6, 16.
Insomnia—Exercises Nos. 2, 11, 12, 10, 16.
Indigestion—Exercises Nos. 2, 10, 11, 12, 14, 15, 16, 17, 24.
Kidney Trouble—Exercises Nos. 2, 5, 11, 12, 7, 14.
Liver Trouble—Exercises Nos. 2, 10, 11, 12, 6, 23, 33.
Malaria—Exercises Nos. 10, 11, 14, 22.
Melancholia—Exercises Nos. 10, 11, 14.
Nervousness—Exercises Nos. 8, 10, 11, 12, 14.
Nightmare—Exercises Nos. 7, 10, 11, 12, 8, 14.
Neuralgia—Exercises Nos. 10, 16, 22, 23.
Rheumatism—Exercises Nos. 3, 5, 8, 10, 14, 28.
Skin Disease—Exercises Nos. 1, 2, 5, 12, 15, 16, 6.

PHYSIOLOGICAL EXERCISES FOR WOMEN

"Exercise, Study, Love. Who believes in this trinity redeems herself from old age."

We all echo the sentiment of the woman who said: "I wish I were like a tree—the older it gets the more attractive it becomes." It is possible for every woman to do this. To remain young, one must feel young; to feel young, one must be healthy; to be healthy, one must exercise. Women claim that it takes too much time to take up a course in Physical Culture. Is twenty minutes a day too much time to give to obtain perfect health, a beautiful complexion, a graceful carriage, a bright eye, a fascinating voice and a magnetic personality?

It is only within a few years that the effect of exercise on the bodily frame of woman has been recognized. The idea that muscular exercise of an active kind coarsens a woman is a delusion. On the contrary, did women exercise more they would not suffer from the ailments they do and they would possess that comeliness, grace and shapeliness of physical contour which makes them "a thing of beauty and a joy forever."

No one wants a woman to have the muscles of an Amazon, but every one does admire grace of form and beauty of outline, a lustrous eye, a clear skin, a bright intellect, a happy disposition and a vivacious manner; and this perfection is never found in a woman who has neglected the physical need of her nature; who does not know the real joy of living, which can only be obtained by perfect physical development.

Women need not be afraid of increasing the size of their waists by exercising. Sandow, who is pronounced by all to be the strongest man, "Has a waist as small as a woman's," so said Dr. D. A. Sargeant, M. A., Director of Gymnastics at Harvard University, after he had tested Sandow's strength.

DIRECTIONS FOR EXERCISES FOR WOMEN

Practice the first eight exercises given in this course four or five days, then take up the special exercises given on the following pages. The first eight exercises of this course should be taken twice every day and before you begin the special exercises.

When you first begin to exercise you must expect unused muscles to be lame and sore, but the best way to cure them is to keep on exercising regularly, when the soreness will soon disappear.

Make every movement with vigor, interest and enthusiasm. No lazy dwelling over the exercises will benefit you. You must put your whole heart and soul and *will* into every stroke, until your whole body glows and tingles with the increased vitality.

Before beginning the exercises take the measurements of your forearm, biceps, bust, waist, hips, thigh and calf and put the measurements on a piece of paper, together with your weight. After practicing a month take the same measurements and your weight. The physical improvement will make you desirous of continuing the exercise.

For those who do not know the proportions which are considered perfect, we give below those of a woman whose height is five feet five inches. The weight should be 128 pounds. Arms extended should measure from tip of middle finger to tip of middle finger just 5 feet 5 inches (the height). The length of her hand should be a tenth of that, her foot a seventh, the diameter of her chest a fifth. From her thighs to the ground she should measure just the same as from her thighs to the top of her head. The knee should come exactly midway between the thigh and the heel. The distance from the elbow to the middle finger should be the same as from the elbow to middle of the chest. From top of the head to the chin should be just the length of the foot, and the same distance between the chin and the arm-pits. A woman of this height should measure 24 inches around the waist, 34 about the bust, if measured under the arms, and 43 if measured over them. The upper arm should measure 13 inches; the wrist 6 inches. The calf of the leg should measure $14\frac{1}{2}$ inches; the thigh 25; the ankle 8.

SPECIAL EXERCISES FOR WOMEN

I.

EXERCISE FOR DEVELOPING MUSCLES UNDER THE ARM

Take first position, inhale quickly as much air as possible and at the same time rise on your toes, and swinging arms full length sideways, touch the sides of your forefingers lightly over the top of your head, then exhale slowly as you swing your arms to your sides and drop back on your heels. Repeat this exercise five times. This exercise will give one a round, plump bust line.



II.

EXERCISE FOR DEVELOPING THE SHOULDERS AND UPPER ARM

Take first position, then make all the muscles tense, raise the arms until they are extended straight in front of you, the thumbs up; then swing both arms as far backward and downward as possible, endeavoring to touch the tips of the back of the fingers behind the small of the back. Repeat this exercise five times.

This exercise strengthens the spine.



III.

EXERCISE FOR DECREASING THE WAIST LINE

Take first position, all the muscles perfectly tense, then extend both arms sideways parallel to the floor, with palms down, and keep the eyes straight to the front and the knees and hips as stationary as possible, then twist the arms and shoulders from the waist alternately as far to the right, and then to the left, as possible. The hands will alternately point, the one straight to the front and the other straight to the rear. Repeat this exercise five times.

This exercise will decrease any extra fat around the waist and harden the muscles, making the waist firm and small.



IV.

EXERCISE FOR REDUCING THE ABDOMEN

Take first position, then clasp both hands tightly over the largest part of the abdomen and bend forward as far as possible, or until the back is parallel to the floor, without bending knees or back; then return to a perfectly straight position.

This exercise reduces the abdomen, hardens the muscles and aids digestion.



V.

EXERCISE FOR ENLARGING THE HIPS

Take first position, extend both arms sideways parallel to the floor with palms down, then bend the body and right knee, but not the left, touch the floor between the feet with the tips of the fingers of the right hand; and at the same time point the left fingers to the zenith. Then straighten the body, keeping both arms straight; repeat the same movement with the left hand to the floor. Repeat this exercise five times.

This exercise is very strengthening to the back and hips.



VI.

EXERCISE TO OVERCOME STOOP IN SHOULDERS

First position: The heels should be in line, and close together, the knees held well back, and the toes turned out at an angle of about sixty degrees; the body straight, and inclined forward, so that your weight falls on the arch of the instep, supported by the toes and only lightly on the heels. The arms should hang tensely from the shoulders. The hips should be a little drawn back, the chest advanced, the shoulders square, the head erect, the chin slightly drawn in, and the eyes looking straight to the front. Try to raise your chest without moving your shoulders. Put your chest forward; keep your shoulders down and your chin in; take a deep, full breath; slowly exhale it by blowing softly and regularly, as if extinguishing a candle. Repeat ten times.

If you are where the air is pure, practice this exercise every time you think of it, and before long you will be the possessor of a straight, beautiful back.

VII.

EXERCISE FOR HOLLOWS IN THE NECK

Take first position, then raise both arms so that your hands pat the chest; lunge forward with the right foot as far as possible (see illustration e), then draw the left foot up to the right, inhaling as you do so, and at the same time throwing the arms out until they are extended at full length in front of you (see illustration f); then clinch the fists, and bring the hands back to their position over the chest, exhaling as you do so, and forcing all the air out of the lungs. Practice this exercise five times, at morning and at night.



e



f

VIII.

EXERCISE FOR PROTRUDING STOMACH

Take first position; place the palms of the hands upon the hips, thumbs forward on the stomach, fingers down; bend the body forward from the waist (not from the hips), gripping the stomach with the thumbs, as in a vise; use the waist as a pivot; bend backward as far as possible, inhaling as you do so; then bend as far forward as possible, exhaling. The body must not bend from the knees, hips nor shoulders, only from the waist.

IX.

EXERCISE FOR DECREASING THE SIZE OF THE HIPS.

Take first position, then raise your arms over your head, and without bending your knees, bend forward and touch your fingers to the floor; then straighten your body and arms again as far as possible toward the zenith. Repeat this exercise five times.

This exercise develops the muscles of the leg and the hips.





X.

EXERCISE FOR ENLARGING THE CALF OF THE LEG

Take first position, then rest the whole weight on one foot; then kick hard and rapidly forward and down, with the toe of the foot pointing outward and downward. Repeat this exercise five times with each foot.

This exercise enlarges the calf of the leg.



XI.

EXERCISE FOR DEVELOPING THE THIGH

Take first position; then raise each knee alternately as high as you can, and strike the chest gently with the knee without bending the body forward. Repeat five times with each knee.



XII.

EXERCISE TO DEVELOP THE WHOLE LEG

Take first position; then swing the arms freely at the sides; drop the entire weight of your body on your heels, and bound up again without bending the body. Keep your balance with your arms.

XIII.

EXERCISE FOR DEVELOPING THE BUST

Take first position; then, tightly clasping a rubber ball in each hand, lift the arms parallel with the shoulders; make all the muscles of the body tense, and rotate the right arm, using the shoulder as a pivot, round and round eight times; then rotate the left arm round and round eight times, taking care to keep the arms perfectly stiff; then rotate both arms together eight times.

This exercise, with the aid of Exercises Nos. 1, 2, 5 and 7, will develop the bust. When you take your cold sponge in the morning, bathe and rub the bust thoroughly in cold water, letting the water run down over the bust. This will make the bust firm. At night, before retiring, bathe the bust again in cold water, drying it thoroughly with a coarse towel; then rub the whole neck, shoulders and bust with cocoa butter, taking care to rub it thoroughly into the skin.

XIV.

EXERCISE FOR THE THROAT.

Stand erect, then bend the head forward and down, then backwards and down, pressing it as far as you can in each direction. Repeat ten times.

XVI.

SECOND EXERCISE FOR THE THROAT.

Holding the face to the front, force the side of the head over first upon the right shoulder, then upon the left. Press gently as far as you can easily. Repeat ten times. These last two exercises will make a round, beautiful throat.

FRESH AIR AND VENTILATION

Fresh air is just as essential to life as food or clothing. A grown man breathes about 16 times in a minute, and at every inspiration takes in about thirty cubic inches of air, and at every expiration exhales about the same amount. The air which has been breathed has lost about 5 per cent of oxygen, and has gained nearly 5 per cent. of carbonic acid, and in addition, the breathed air contains a greater or less quantity of highly decomposable animal matter. A deficiency of oxygen and an accumulation of carbonic acid in the atmosphere produces injurious effects, such as headaches, drowsiness, and, in time, it lowers the vitality and predisposes one to disease. To avoid breathing the same air over and over, one must have well-ventilated rooms. To do this each room should be provided with some channel for the escape of impure air and some means to let in the fresh air and light. This is accomplished by having a window open at both the top and bottom during a portion or all of the day. The impure air rises to the top of the room and goes out; and pure air comes in at the bottom. A window in a sleeping room should be open all night at the top and bottom, if only an inch. Because a room is cold it necessarily does not follow that the air is pure; no matter how cold it is, the air cannot be pure unless the room is properly ventilated. Let in the pure, fresh air and the bright sunshine, if you want to be healthy.

BATHING

Bathing is the education of the skin, and is absolutely essential to the health and vigor of the system.

When one considers the functions of the skin, with its innumerable glands and little tubes, which remove the worn-out, useless matter from the system, one realizes that it is necessary to bathe with soap and water. Unless we do so, and remove the excretions, the glands become obstructed, and unpleasant odors arise.

If one is strong enough, he should take a cold bath (that is, with the water at a temperature of 60 degrees Fahrenheit)

every morning on arising. It is a powerful tonic to the general system. Care must be taken not to remain in the bath too long, two or three minutes being the limit. Immediately after leaving the bath the body should be thoroughly dried and rubbed with a coarse towel until a glow is experienced.

A cold bath contracts the vessels of the skin, and its tonic properties and hardening process prevents the taking of sudden colds.

If one cannot accustom himself to a cold bath daily, because of low vitality, he should take a cold sponge bath every morning, and by quickly rubbing and drying the body with a coarse towel he can obtain all the tonic effects of a cold bath.

If the vitality is very low, or one is ill, take a woolen cloth, wet in cold water, rub the body with it, then rub dry and warm with a dry towel. After having done this, rub the entire body vigorously with the hand.

A warm bath (that is, with the temperature from 92 to 98 degrees Fahr.) should not be taken more than twice a week, and then preferably just before retiring. A warm bath thoroughly cleanses the body; it equalizes the circulation, and softens the skin by removing all impurities; but if taken too often it is weakening.

CLOTHING

In order to be perfectly healthy, one should maintain a uniform temperature of the body. When the body is warm there is a free and equal circulation of the blood. To keep the body at a uniform temperature, the matter emitted from the system, and which is constantly escaping through the pores of the skin, should be absorbed or taken away from the body. Flannel is the best material to wear next to the skin, for it imbibes the perspiration, and, being very porous, allows it to escape. Flannel also affords protection from the cold. In a climate having the extremes of heat and cold, flannel should always be worn next to the skin in winter. During the summer one wears much less clothing, and the matter emitted from the system has a better chance to escape from the body. The least clothing that can be worn (either summer or winter) and keep the body warm, the healthier.

The feet should always be kept warm and comfortable. Do not indent the legs with tight garters, as they interfere with the circulation, and will give one cold feet. Tight lacing interferes with the free and healthy movements of the body, and causes a pressure which is alike injurious to the organs of respiration, circulation and digestion.

Do not wear any undergarment to bed which has been worn

during the day, especially if it has been next to the skin. This garment will be saturated with the matter thrown off by the body during the day, and should be thoroughly aired during the night.

THE DIET

The two important things which determine the amount of food required by different persons are: First, the physical development and body weight; and second, the amount of work performed. A well-developed man, engaged in active work, will require more food than a small, poorly-developed man who is not engaged in active work.

Plenty of time should be taken at meals to thoroughly masticate the food and mix it with the saliva, which puts the food in condition to be thoroughly digested by the juices of the stomach. If one does not eat slowly, then the food does not become saturated with the saliva of the mouth, and the whole burden of digestion rests with the stomach, which, naturally, gives it double work, and makes it get out of order. Tranquility of mind and pleasant conversation during meals, are great aids to digestion.

Eat slowly, masticate the food thoroughly, and drink moderately during meals. Practice chewing each mouthful twenty times. If you only half chew your food, and wash it down with water, tea or coffee, you do not permit the juices of the mouth and stomach to fulfill their proper functions, and indigestion is the result.

Do not eat too much. People who overload their stomachs, and suffer in consequence, should realize that nutrition of the body depends not upon the amount of food eaten, but upon the amount digested. When the stomach is overloaded it is unable to digest all the food, and that which is undigested ferments, and gives rise to unpleasant results. An excellent rule to follow is to rise from the table before the desire for food is quite satisfied. A sense of hunger is not always a sure sign that food is needed. The nerves of the stomach can be vitiated and a false desire is created for food. Then follows indigestion, which means that the stomach should be rested.

Eat regularly. The stomach, like the other organs of the body, must have intervals of rest, or it will become exhausted and unable to do its work. No food should be taken except at meal time. People who are constantly eating candy, nuts, cake, fruit, etc., between meals are likely to have indigestion and weak stomachs.

Do not engage in any active physical or mental exercise after eating heartily. Rest at least twenty minutes. The stomach, after

a hearty meal, demands a greater amount of blood to accomplish the work of digestion, and no organ can more easily comply with that demand than the brain, which, when in full activity, is supplied with one-seventh part of the whole blood of the body. Rest the body and the brain after eating, and the blood supply will aid digestion.

A certain interval should be allowed to elapse between the last meal of the day, whether it be called dinner or supper, and the time of going to bed. All the functions of the body pass into a state of inactivity during sleep, and all the organs of the body should rest from their labors. An hour and a half, or two hours, is time enough to allow after a light supper, but at least two and a half hours should elapse between a heavy dinner and the time of retirement.

On the other hand, a perfectly empty stomach does not contribute to rest nor repose; indeed, it is frequently the cause of wakefulness. A sense of all the wants of the body being satisfied conduces greatly to repose. Many persons who are forced to retire late find that they sleep much better if they take a cupful of clear soup, or something light, just before retiring.

A meal should not be commenced immediately after active or violent exercise. Fifteen minutes' rest should be taken after violent exercise before beginning a meal.

In order that the blood should be pure the food should be nutritious and well cooked.

The important substances which should be got from food are phosphorus, sulphur, soda, iron, lime and potash. Lime forms bone, and in early life, when the bone is undergoing development, is required in greater quantities than by an adult. During the ages of 20 and 50 the bone is hardened, and the system does not require as much lime. Lime exists in water, milk, and in nearly all foods except those of an acid character.

Phosphorus exists in fish and in eggs, and in the hulls of wheat. Persons who perform a large amount of mental labor require more phosphorus than those engaged in other pursuits, as it stimulates the brain and nervous system; therefore, brain workers should eat plenty of fish, eggs, and bread made of unbolted flour.

Sulphur, iron, soda and potash are all necessary in the various tissues of the body, and a deficiency of any one of them for a length of time results in disease.

Sulphur exists in eggs and in the flesh of animals, and often in water.

Iron exists in the yolk of eggs, in animal food and in several vegetables—spinach, for instance.

Soda is supplied in nearly all food, but largely in salt.

Potash exists in both vegetable and animal food.

Mutton, beef and fish produce muscle. Domestic fowl are nourishing, and easily digested. Pork should never be eaten except in winter. It, as well as veal, is hard to digest. Milk is very nutritious, and more easily digested than almost any other article of food. Raw oysters are easily digested.

Of the vegetable foods, wheat is the most nutritious, barley next. Beans and peas and potatoes contain both nutritive and medicinal qualities. Oatmeal furnishes nourishment for the brain.

Water is the only vehicle by which nutritious material is conveyed to the blood, and, through the blood, to all parts of the system for renewal of the waste which goes on from hour to hour as long as life lasts. Water is the only medium through which waste is conveyed from all parts of the system to the excretory organs to be expelled.

SLEEP AND REST

Rest of the entire body arrests further waste of the nerve force and repairs weakened organs.

Sleep is a preventative as well as a cure for disease, and while a perfectly healthy adult can for a long time do without much sleep, yet the lack of it leads to contagious diseases, fevers and disorders of the brain. The waste of nerve force of the body is restored by sleep. If you cannot sleep, and are suffering from insomnia, go through exercises Nos. 1, 3, 7 and 8 four or five times before retiring; take a full or a sponge bath, a cup of warm beef tea, or a tumbler of milk heated almost to boiling point, and upon retiring you will obtain the needed rest and sleep.

Do not take drugs or opiates to force sleep without consulting a physician.

Between the years of 10 and 15 at least ten hours sleep should be had out of the 24; from 18 to 25 years of age at least eight hours; from 25 to 50 years of age seven hours. After 50 years of age nature calls for more or less sleep in proportion to the work performed.

In many cases a day sleep of half an hour, especially after meals, is more restful than at any other time. If you cannot sleep for half an hour, just sit quietly down and relax every muscle for ten minutes, and you will find that you will be much refreshed, and will be able to accomplish twice as much during the balance of the day for that ten minutes' rest.

The sleeping room should be well ventilated, and the air kept moderately cool. Care should be taken to prevent a draught upon the body during the night, but the sleeper should have plenty of fresh air.

Feather beds are not healthful; nor should the bed be too soft. Do not use any more covering than is actually necessary for comfort.

The proper position in which to sleep is upon the right side. Do not lie upon your back, and do not cover your face while asleep, as this necessitates breathing the same air over again, which is very injurious to the health.

When you lie down let go of the body; see that your knees are not drawn up and your back bowed; relax the whole body, and think of rest, peaceful rest!

How to relax: Lie flat on your back, or in any other comfortable position, in a comfortable place, and relax every muscle under the control of your will, and at the same time literally stop thinking for five minutes, or longer, when needful. You will never know what absolute rest is until you have learned to relax perfectly. Remember this forced quiet is not mere reverie, but it is the intentional conscious stopping of all thinking.

THE MIND

The mind has its needs, that are no less exacting than those of the body. A sense of age always follows upon a steady routine method of life. We lose vigor, youth and beauty through thinking over and over the same thoughts. Take people whose lives are monotonous, and run in a rut, and you will find that they age prematurely. A good example is the public school teacher, who is content to work year after year in the same grade without ambition, and without seeking any mental diversion or pleasure to stimulate and quicken the brain and the heart with new thoughts and feelings to keep her mind alert and her body agile. Take a bookkeeper who drudges month after month, and year after year, without any amusement or other mental diversion; his face soon looks like the books upon which he works, full of lines and marks. One need not necessarily study a language, a science, or an art, for mental diversion, for there are thousands of interesting topics upon which to feed the mind—pictures, flowers, books, animals, psychology, electricity, etc., etc. Study more than one subject, for intellectual activity tends to infuse greater life into every part of the system.

THOUGHTS

Your thoughts pencil your face, so aim to control them. Do not think evil, envious and impure thoughts. If you are worried, in trouble, or ill, do not permit your thoughts to dwell upon these subjects. Just think of the merriest time you ever had in

your life; the kindest thing that was ever done for you; send out the most generous, the sweetest, the most hopeful thoughts to your friends, and joy will pencil your face instead of wrinkles. Do not think of growing old if you want to keep the lines away. Think of youth, of strength, of happiness, and of love. Thoughts of revenge, malice, hatred, jealousy and melancholy react upon yourself.

HINTS FOR THE SICK ROOM

Massage, when properly used, relieves pain. It consists in kneading the body in all directions, just as a baker kneads dough. Massage treatment is valuable in both disease and health; in the former by increasing the surface circulation, and in the latter by keeping the surface circulation in normal channels.

If suffering from exhaustion or extreme nervousness, if the whole body is rubbed thoroughly with alcohol once a day for three or four days, you will be amazed at the good results.

Cold Packs. If suffering from a cold on the lungs, or in the throat, apply a cold pack in the following manner: Get ready for bed; take a large towel and dip it in cold water, placing it over the throat and chest; then place several thicknesses of dry cloth over the wet towel, covering the whole body. Place a hot-water bottle at the feet. The cold pack should remain on the body about thirty minutes. After removing the pack rub briskly with a dry towel, taking care not to expose the neck or throat to a draught.

Sprains. The affected part should be kept at rest in an elevated position, and hot or cold water applied frequently. If there is much inflammation extract of smart-wood is an excellent application.

Bruises. The affected part should be kept at rest and frequently bathed with tincture of arnica.

Fainting. When a person faints he should be allowed to remain or be placed in a recumbent posture and his clothing immediately loosened. The extremities should be rubbed, the patient permitted to have plenty of fresh air, and, if at hand, ammonia or camphor should be applied to the nostrils.

Burns and Scalds. Soothing applications and those which will exclude the air should be made. Grated potato, poultices of slippery elm, sweet oil, cotton saturated in a mixture composed of two or three grains of carbolic acid and two ounces of glycerine, and linseed oil and white lead, are all beneficial for the treatment of burns. If internal treatment be necessary, it should be given under the direction of a competent physician.

Sun Stroke. The patient should be at once removed into the shade. If the face is flushed, apply cold water to the head and neck, and mustard to the feet. The body should be bathed in cold water and the head slightly elevated. If the countenance is pale the symptoms denote exhaustion, and the patient should be kept in a recumbent position, the extremities rubbed, camphor and ammonia inhaled, mustard applied to the spine, and stimulants, such as brandy or whiskey, should be administered.

Drowning. The patient should be gently placed upon the face, with his wrists under his forehead. The tongue will then fall forward, and the water run out of his mouth and throat, while the windpipe or air passage will be free. To restore respiration he should be instantly turned upon his right side, his nostrils excited with ammonia, and cold water dashed upon his face and chest. If this operation proves unsuccessful, replace the patient upon his face, care being taken to raise and support the chest; turn the body gently on the side and quickly again upon the face. Alternate these movements about every four seconds, and occasionally change sides. When the body is turned on the face, gentle but efficient pressure should be made along the back, between the shoulder blades, to assist in forcing the air out of the lungs; but this pressure ought to be removed before the patient is turned back on his side. As soon as respiration is established, warmth may be promoted by the application of warm flannels to the body and bottles of hot water to the stomach, armpits, thighs and feet. During the entire process of restoration the body should be thoroughly rubbed upwards. Turning the body upon the back, or handling it roughly, should be avoided. The person should not be held up by his feet or be rubbed with salt or spirits. Rolling the body on a cask is improper. Do not allow a crowd to surround the body.

RECIPES FOR DISHES FOR THE SICK-ROOM

Barley Water. Wash two ounces of pearl barley with cold water. Then boil it for five minutes in some fresh water, and throw both waters away. Then pour on two quarts of boiling water and boil it down to a quart. Flavor with thinly cut lemon rind, and sugar to the taste; but do not strain unless at the patient's request.

Beef Juice. Broil quickly some pieces of round or sirloin steak of a size to fit in the cavity of a lemon squeezer. Both sides of the beef should be quickly scorched to prevent the escape of the juice, but the interior should not be fully cooked. As soon as ready, the pieces should be pressed in the lemon squeezer, previously heated by being dipped in hot water. The juice as it

flows away should be received into a hot wineglass, and after being seasoned to the taste with salt and a little cayenne pepper, taken while hot.

Beef Tea. One way is to chip up lean beef, put it in a porcelain or tin saucepan, cover it with cold water, and bring it up to just below the boiling point, at which temperature retain it for ten minutes; then season and serve.

Another way is similar to the foregoing, with this difference, that the juice of the meat is squeezed through a piece of muslin or crash, making the tea richer.

Another method, and the best, is to take lean beef, cut it into fine bits, put them into a tightly covered vessel, which is placed in a kettle of water and kept boiling. Thus the whole strength of the juice will be obtained from the meat without losing any of its properties. It can be seasoned to the taste and reduced with water to suit the needs of the patient.

Bouillon. Place in a tin vessel that can be hermetically closed, alternate layers of finely minced meat and vegetables. Seal it up and keep it heated in a water bath for six or seven hours, and then press out the broth.

Chicken Broth. Skin and chop up a small chicken, or half a large fowl, and boil it, bones and all, with a blade of mace, a sprig of parsley, and a crust of bread, in a quart of water for an hour, skimming it from time to time. Strain through a coarse colander.

Egg Nog. (A very nutritious drink.) Scald some new milk by putting it, contained in a jug, into a saucepan of boiling water, *but it must not be allowed to boil.* When quite cold, beat up a fresh egg with a fork in a tumbler with some sugar; beat quite to a froth; add a dessertspoonful of brandy, and fill up the tumbler with scalded milk.

Oatmeal Gruel. Take two tablespoonfuls of oatmeal, one saltspoonful of salt, one small teaspoonful of sugar, one large cupful of boiling water and one of milk. Mix the oatmeal, salt and sugar together and pour on the boiling water. Cook for thirty minutes, then strain with a fine wire strainer to remove the husks; place again on the stove, add the milk, and heat just to the boiling point. Serve hot.

Oyster Broth. Take six or eight fresh oysters, chop them small, put them with their liquor into an enameled saucepan, pour over them a cupful of cold milk, and bring the liquid slowly to the point of boiling. Simmer for a minute or two, strain through a fine sieve, season with salt and white pepper, add a teaspoonful of cream, and serve.

Port Wine Jelly. Put one ounce of isinglass into a quarter of a pint of water, and set on the fire until the isinglass is dis-

solved. Then add one ounce of sugar and a pint of port. Strain through muslin into a mold and let it set.

Raw Meat Juice. Add to finely minced steak cold water, in the proportion of one part of water to four of meat. Stir well together, and allow to stand for half an hour. Forcibly press the juice through muslin by twisting it.

Rice Water. Wash well one ounce of Carolina rice with cold water. Then macerate for three hours in a quart of water kept at a tepid heat, and afterward boil slowly for an hour, and strain. May be flavored with lemon peel, cloves, or other spice.

Sago. Put one-half ounce of sago into an enameled saucepan, with three-quarters of a pint of cold water, and boil gently for an hour and a quarter. Skim when it comes to a boil, and stir frequently. Sweeten with a dessertspoonful of sifted loaf sugar. A tablespoonful of wine or a dessertspoonful of brandy may be added.

Toast Water. Take a slice of stale bread—crust is to be preferred—and toast it slowly all through without burning it. Let it get cold, and then pour over it a quart of boiling water, and let it stand, covered, until cold. Strain it through muslin before serving.

DIET FOR DIFFERENT DISEASES.

DYSPEPSIA OR INDIGESTION.

The symptoms of dyspepsia are a sense of weight and discomfort in the upper part of the abdomen, coming on soon after taking food; windy distention of stomach and intestines, often accompanied by palpitation on any exertion; belching of wind from the stomach; heartburn, etc. These symptoms are often accompanied either by headache and general lassitude, or by restlessness and irritability, and sometimes there may be vomiting. Imperfect mastication, from haste in feeding, or from defective teeth, or from taking food difficult of disintegration in the mouth is the most common cause of dyspepsia. Therefore, dyspeptics should prefer the shorter-fibered meats, such as fish, mutton, chicken, and pheasant, rather than beef, goose, duck and wild fowl. Veal and pork should never be taken, and lamb and rabbit are not easily digested. Sole, whiting and flounder, when plainly grilled, or boiled, are more digestible than other kinds of fish.

Grilled (not fried) fat bacon, eaten with dry toast, is easily digested, and a good form of fatty food, and when accompanied by the yolks of one or two poached eggs, it forms a nutritious meal.

Avoid all food saturated with fat, such as buttered toast, muffins, pastry, etc., and sweet dishes that are apt to undergo acid fermentation; and unripe acid fruits, nuts, and the hard coverings of vegetables. Avoid all rich sauces, and when butter is required, as with fish, use plain, fresh butter.

Certain kinds of bread are very indigestible. A bread which crumbles easily, which is not too moist, and which does not mass together in the mouth, is the best.

Tea, coffee, and alcoholic beverages should be taken very, very moderately; and in cases of dyspeptics who have a great deal of mental work to do, not at all. In cases where these drinks interfere with digestion it is a good plan to sip a cupful of hot water instead.

Animal food, and soups, well selected and pleasantly flavored are better digested than foods made of flour and meal. The cook

ing should be simple, and the natural flavor of the food preserved; all twice-cooked meat should be avoided.

Green vegetables, unless in small quantity, especially of the cabbage tribe, should be avoided.

CONSTIPATION.

In most cases where people suffer from constipation it is because they do not drink enough water. The freer the supply of water to the blood the more fluid the intestinal secretions are likely to be; and if the supply of fluid to the blood be limited, less fluid is likely to be secreted from the intestinal glands. This is the reason why people who take a large glass of cold water at bed-time, and the first thing in the morning, are never troubled with constipation. People who perspire very freely should drink more water than those who do not, for the reason that the mucous membrane of the intestines will be dryer because of the excessive loss of fluid from the skin.

Fresh vegetables and fruit should be added to the diet. Brown, or whole-meal bread, green vegetables, and ripe or stewed fruits, such as apples, pears, prunes, figs, etc., have an aperient tendency.

Eggs, milk, and most starchy foods, aggravate the constipated habit.

Oatmeal and maize are slightly aperient; honey added to bread will make it more aperient.

Spinach, salads with a dressing of olive oil, and vinegar, pepper and salt (using three times as much oil as vinegar) are the very best things for constipation.

DIARRHOEA.

Especially avoid green vegetables, raw acid fruits, nuts, potatoes, coarse brown bread, and all rich, fat or acid dishes; also all animal foods which are tough and difficult to digest, such as pork, veal and beef—unless reduced to pulp.

Milk, boiled, is good for diarrhœa, as also are arrowroot, tapioca, sago, rice, etc., prepared with water, and flavored with nutmeg, cloves or cinnamon.

An acute attack of diarrhœa can be rapidly cured by restricting the food for twenty-four hours to water arrowroot, as above mentioned, and with the addition of two or three tablespoonfuls of brandy, or a tablespoonful or two of port wine to each teacupful of arrowroot.

Beef tea, or clear soups, may be taken, but they should be thickened with arrowroot, sago or tapioca.

After the acute attack is over, the return to the ordinary diet should be gradual, and for a few days it is better to take only clear soup or beef tea, boiled chicken, rice, boiled whiting or sole, and a little mashed potato.

DIABETES.

The only kind of bread which should be eaten is gluten. Gluten meal should be used to thicken all broths and for making puddings. Torrified bread, made by toasting thin slices of ordinary bread before the fire until they are deeply and thoroughly browned—almost blackened—so that the starch and gluten are in a great part destroyed by the heat, is a highly acceptable form of food.

Almond cakes are a good substitute for ordinary bread. The following is a good recipe for making them: Take of blanched sweet almonds one-quarter of a pound, beat them as fine as possible in a stone mortar; remove the sugar contained in this meal by putting it into a linen bag and steeping it for a quarter of an hour in boiling water, with a little vinegar; mix this paste thoroughly with three ounces of butter and two eggs; next add the yolks of three eggs, and a little salt, and stir well for some time. Whip up the whites of these eggs, and stir in. Put the dough thus obtained into greased molds, and dry by a slow fire.

All kinds of animal flesh and fats are permitted, with the exception of liver. Eggs, cheese, butter, cream, ham, bacon, sausages, fowl, game, fish (fresh and smoked), crabs, lobsters, oysters, and olive oil are good. In cooking any of the above, as fish, etc., no flour or other starchy material may be used.

Green and fresh vegetables are freely allowed, such as cabbage, spinach, sorrel, lettuce, dandelion, cucumber, watercresses. Carrots, turnips, beans, peas and beet root are not allowed.

All candied and preserved fruits are prohibited, as also are all the sweet fresh fruits; but gooseberries, apples, currants and cherries, because of the acid they contain, may be eaten.

All vegetables and fruits containing large amounts of starch and sugar must be strictly forbidden.

The thirst of a diabetic is usually urgent, and constant, but it is injurious to drink too much.

All strong alcoholic drinks must be forbidden. Unsweetened spirits, such as brandy, gin and whiskey, mixed with water, may occasionally be taken. Weak tea or coffee, without sugar, is permissible. Alkaline waters are very beneficial, such as vichy, apollinaris, etc.

BRIGHT'S DISEASE.

Animal flesh should be avoided, or limited to a little white meat. All kinds of vegetables and fats are permissible. Fruit, milk, butter, cream, and other fats, are good. Ham and cold roast pork, especially the fat, may be taken sparingly. Cheese should never be eaten. Milk is excellent, but all kinds of beer, wines and spirits are forbidden. All pastry and sweets are forbidden.

GOUT.

Green vegetables and fresh fruits are especially suitable. White meats are considered more appropriate than brown, although small quantities of well-cooked and tender mutton or beef are sometimes allowed. Rich and fat sauces should be altogether avoided, as also all entrees and dishes served with sauces. Strong meat soups are undesirable; vegetable soup may be taken when only slightly flavored with animal extract. Cheese should be avoided, and eggs also. Oysters may be partaken of sparingly, but rich fish, such as salmon, mackerel, lobster and crab, should be avoided. All fresh vegetables, with the exception of tomatoes and asparagus, are allowed. Bread should be taken only in moderation, and is least harmful when toasted. Most fresh, ripe fruits, and most cooked fruits, such as stewed or roasted apples, are allowed. As for beverages, first, if you can digest it, milk is the best, especially if a little vichy or apollinaris water is added. A large cupful of hot water half an hour before a meal, and at bedtime, and the use of vichy and apollinaris, is recommended. Strong beers, porter and stout, should be avoided, as also all strong, sweet or spirituous wines. The only kind of spirits allowed are fine old Scotch whiskey and dry Plymouth gin. Tea and coffee are useful beverages for the gouty, but they must be taken without sugar.

OBESITY.

All kinds of fatty food, the fat of meat, butter, cream, and fatty sauces and soups, everything that contains sugar, and all forms of starchy food are prohibited. All kinds of meat in small quantities, asparagus, spinach, cabbage, peas and beans are allowed. One cup of coffee, tea or milk, morning and evening, and about eight ounces of water, should comprise all the fluid consumed in twenty-four hours. Hot water, or warm aromatic beverages, may be taken freely between meals. No beer, porter, or sweet wine of any kind are to be taken; no spirits, except in very small quantities. Bread should be toasted in thin slices.

SCROFULA AND CONSUMPTION.

Milk is a most valuable food. For those who do not digest milk perfectly it is well to add to each glass of milk two tablespoonfuls of hot water, in which about six grains of bicarbonate of soda and five grains of common salt are dissolved. This greatly aids the digestion of milk. Kumiss is greatly used. As much butter and good cream as can be digested should be taken. Cocoa and chocolate are useful forms of food. Of the various forms of animal food, well-cooked beef, mutton, chicken and game, clear turtle soup, oysters, many kinds of fish—sole, whiting, turbot, cod, herring, flounders, smelts and brill—are all suitable. The use of rare meat has been highly extolled. Beef juice is also good. Whole meal, or well-made brown bread, is, on account of the phosphates contained in it, better than white bread. Oatmeal and the flour of maize are both very suitable. Malt extracts are largely used. Avoid with the greatest care, clarets, port and sherry. Small quantities of alcohol, given frequently, have an excellent effect in supporting the strength, and especially during the night it is important to give two or three tablespoonfuls of brandy or whiskey, alone, or with a little fluid food, such as milk, or beef tea, or a whipped egg.

Pastry, fruits (uncooked), salads, pickles, and all forms of indigestible foods, are excluded.

On waking in the morning, a tumblerful of milk should be taken, mixed with a little hot water, to which it is often useful to add a few grains of common salt and bicarbonate of soda, especially when accumulated mucus has to be expectorated.

ASTHMA.

Great care should be taken to avoid indigestible forms of food, suppers and late dinners should be prohibited, and, where it is possible, the chief meal should be taken in the middle of the day.

The lean of tender mutton and beef, and the best parts of chicken, white game, and white fish, should be selected. Vegetables should be cooked in the form of purees; and a well-made puree of spinach and lettuce is very wholesome. Sugar, starchy and fatty foods should be avoided. Light puddings, such as sago, rice, tapioca, macaroni, with a little fruit pulp or jelly, are not restricted. Eggs lightly cooked, or whipped up with hot milk, are a very convenient form of food. Only a small quantity should be sipped at each meal. A glass of hot water in which a few grains of sodium bicarbonate have been dissolved, before meals, and at bedtime, is recommended. Strong coffee is often of use

in allaying the paroxysms. Whiskey or brandy, with a little hot milk and seltzer water, is often used.

ACUTE RHEUMATISM.

The food should be of the lightest possible kind, cooling, and entirely fluid. A pint of milk, diluted with a pint of boiled water, and containing 30 grains of sodium bicarbonate, and ten grains of common salt, cooled by a lump of ice, should be kept on hand, and a tumblerful taken frequently. Three or four pints of milk should be taken in 24 hours. Fresh lemonade may also be taken freely. Thin oatmeal gruel and barley water may also be taken, as well as milk. All meat extracts and animal broths should be avoided at first. After the pain has begun to cease, light clear soups and broths may be given, flavored with fresh vegetables. A little pounded beef or chicken, and crumbs of stale bread, may be mixed with the soup; light puddings, bread and milk, and such foods, are also suitable. But all foods containing sugar should be avoided. No pastry, sweets, or fermented drinks should be allowed.

CHRONIC RHEUMATISM.

Fresh, tender meat, poultry, game, and fish, in strict moderation; fresh vegetables, stewed celery, Spanish onions, lettuce, water-cress, and ripe and cooked fruits, rice, tapioca, butter, cream and milk are allowed. Fermented alcoholic drinks are best wholly avoided. Home-made lemonade, and plenty of pure water, are the best beverages; in fact, the best thing for rheumatism.

DISEASES OF THE SKIN.

Buckwheat cakes, oatmeal, all greasy food, such as doughnuts, sausages, cheese, fried meats, ill-cooked and rich pastry; excess of sweets, nuts, and other indigestible substances, should be avoided; also all forms of alcohol, as well as tea and coffee. A tumblerful of water should be taken before each meal.