

The Way College of Emporia  
1979-80  
Fitness For Living

"An Attitude of Heart"

Total fitness is the responsibility of every leader (spiritual, mental, physical). As living sacrifices for God, our lives must manifest His power and vitality in daily living. The Fitness for Living program is designed to aid each individual in attaining this goal by building positive attitudes and habits of physical, mental and spiritual discipline, which are necessary for living more abundantly.

The goal of our ministry is to move God's Word over the world and then to keep it there by permeating culture with principles of positive Christian living. In order to accomplish this goal, the Body of Christ will need endurance and stamina in all facets of life. Our Fitness for Living department is directed towards a concentration of developing physical endurance in keeping with the whole man concept of God's Word. We believe that the building of positive attitudes and habits of physical exercise will enhance an individual's physical vitality and stamina, increase his mental capabilities, and provide a resource for gaining great spiritual understanding.

As one body striving together for the faith of the gospel, our minimum effort is 100%. Each individual member must contribute his full measure in order for the Body to be complete. Our standards for personal and community excellence are God's Word. As a household, let's develop ourselves into a team of great "spiritual athletes" with hearts of THE CHAMPION, Jesus Christ.

Remember:

- 1) "Fatigue makes cowards of us all"
- 2) "Quitters never win and winners never quit"
- 3) "When the going gets tough, the tough get going"
- 4) "Your overall health is your greatest wealth"

I can do all things through Christ which strengtheneth me.  
Philippians 4:13

Part I

FITNESS

Physical Fitness Defined

Physical fitness is the ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure time pursuits and to meet unforeseen emergencies. Thus, physical fitness is the ability to last, to bear up, to withstand stress, and to persevere under difficult circumstances where an unfit person would quit. It is the opposite to becoming fatigued from ordinary efforts, to lacking energy to enter zestfully into life's activities, and to becoming exhausted from unexpected, demanding physical exertion.

The definition given implies that physical fitness is more than "not being sick" or merely "being well." It is different from immunity to disease. It is a positive quality, extending on a scale from death to abundant life. All living individuals, thus, have some degree of physical fitness; it varies considerably in different people and in the same person from time to time.

In as much as man is a total individual--not divisible into discrete parts--his physical fitness affects in some degree all of his life's activities.

### Physical Fitness Components

Perhaps the complex of physical fitness can best be understood in terms of its components. While these components are interrelated--also, not discrete--each has a distinctive feature and each contributes an essential element of physical fitness.

1. Muscular strength: the contraction power of the muscles.
2. Muscular endurance: the ability of muscles to perform work. Two variations of muscular endurance are recognized: isometric and isotonic.
3. Circulatory-respiratory endurance: characterized by moderate contractions of large muscle groups for relatively long periods of time, during which maximal adjustments of the circulatory-respiratory system to the activity are necessary.
4. Muscular power: ability to release maximum muscular force in the shortest time.
5. Agility: speed in changing body positions or in changing direction.
6. Speed: rapidity with which successive movements of the same kind can be performed.
7. Flexibility: range of movement in a joint or a sequence of joints.

### Coordination

Coordination is the activity in which the nerves and brain work together with the muscles as a team. The more astutely the team performs, the more skilled the coordination. The alternative to this aspect of fitness is clumsiness. Coordination is learned by doing, and sports and other physical activities are excellent conditioners in that respect.

### Cardiorespiratory Endurance

When a skeletal muscle is exercised it grows stronger. Similarly, when the heart is exercised, it grows stronger. The conditioning effect of the skeletal muscles is measured in terms of strength and endurance. But with the heart improvement is determined by such standards as a reduced resting pulse rate, a lower pulse rate when certain workloads are imposed on it, and a faster rate of recovery when the load is removed.

Cardiovascular fitness is an area often overlooked in physical fitness programs. No exercise program which ignores cardiovascular health is truly adequate. And that, of course, means vigorous physical activity sufficient to push up the pulse rate significantly. The pulse rate is the key to how much exercise is enough, but it must be pushed up high enough and held there long enough for cardiovascular conditioning to take place. The ideal exercise program will include cardiovascular conditioning as well as activities for the other components of fitness.

Training effect is the whole goal of endurance exercise.

The training effect:

Increases the efficiency of the lungs, conditioning them to process more air with less effort.

Increases the efficiency of the heart in several ways. It grows stronger and pumps more blood with each stroke, reducing the number of strokes necessary.

Increases the number and size of the blood vessels that carry the blood to the body tissue, saturating the tissue throughout the body with energy-producing oxygen.

Increases the total blood volume, again providing more means for delivering more oxygen to the body tissue.

Improves the tone of the muscles and blood vessels, changing them from weak and flabby tissue to strong and firm tissue, often reducing blood pressure in the process.

Increases the efficiency and overall condition of the body, especially its most important parts, the lungs, the heart, the blood vessels and the body tissue, building a bulwark against many forms of illness and disease.

May change your whole outlook on life. You'll learn to relax, develop a better self-image, and be better able to tolerate the stress of daily living. And, what is very important, you'll sleep better and accomplish more work with less fatigue.

EXERCISES: 5 Basic Forms of Exercise

Isometrics (literally, 'equal measure.') Isometric exercises contract muscles without producing movement or demanding appreciable amounts of oxygen. Generally, they tense one set of muscles against another or against an immovable object. Isometric exercises are capable of increasing the size and strength of individual skeletal muscles, but they have no significant effect on overall health. Since isometrics affect only the skeletal muscles, they do not strengthen the heart, the lungs or the blood system. Static contractions of a muscle in only one direction produces only one-dimensional strength, strength that would be useless for work in other dimensions.

Isotonics (literally, 'equal tension.') Isotonic exercises contract muscles and produce movement. None of these exercises make very much demand on the oxygen-consumption process. They are aimed almost entirely at the skeletal muscles. Isotonics are preferable to isometrics because they exercise muscles over a range of motion. They are dynamic or three-dimensional exercises.

Isokinetics (literally, 'equal motion.') Isokinetic exercises are different from isometric and isotonic exercises in that they provide for a maximum contraction of the muscle. They offer a means of developing greater power and endurance through loading the muscle to capacity throughout the range of motion of a given joint affected by the muscle.

Anaerobics (literally, 'without oxygen.') Anaerobics fall into two classes, those that demand reasonable amounts of oxygen but are cut short of voluntarily, and those that demand exorbitant amounts of oxygen and are cut short involuntarily. Exercises like these that rapidly create large oxygen debts are used during practice by competitive athletes to build up speed. They have no place in an ordinary physical fitness program.

Aerobics (literally, 'with oxygen.') These are the foundation exercises on which any exercise program should be built. These exercises demand oxygen without producing an intolerable oxygen debt, so that they can be continued for long periods. They activate the training effect and start producing significant changes in the body: the lungs begin processing more blood with fewer strokes, the blood supply to the muscles improve, and the total blood volume increases.

In short, there is an improvement of the body's capacity to bring in oxygen and deliver it to the cells where it is combined with foodstuffs to produce energy. These exercises increase the oxygen consumption and, consequently, the endurance capacity. The effect obtained from the exercise selected depends upon the type, the duration, and the effort expended. Running is one of the most beneficial forms of exercise to obtain rapid improvement.

## BASIC EXERCISES

Adapted from: Royal Canadian Air Force Exercise Plan for Physical Fitness

This is a brief summary of two programs designed to give God's men and women a step by step system of vigorous exercise to compliment their regular activities and assure them of total body fitness.

XBX 9 Minute-A-Day Plan for Women  
5BX 5 Minute-A-Day Plan for Men

### Benefits:

1. XBX and 5BX provides a maximum amount of exercise on a maximum number of muscles in a minimum amount of time.
2. Increases endurance, keeps muscles flexible and supple, improves efficiency of the heart, lungs, and other organs, and increases capacity for physical endurance.
3. Little space and no equipment needed.
4. Progress is dependent upon the ability and willingness of each individual. Charts provide an accurate recording method to see one's progress daily.
5. Combined with a good diet, running and a Christ-like attitude, it will help to firm muscles and give the believer his or her best appearance.

### How:

Both XBX and 5BX involve basic exercises. The XBX has nine basics and 5BX has four. These basics increase in number and degree of difficulty as the program progresses. The following chart illustrates the step by step process.

A	Chart 2
B	After Completing
C	All steps move to
D	Chart 3
A	Chart 1
B	After Completing
C	All steps move to
D	Chart 2

Combined with your running program, these exercises will enhance your fitness for living. Exercise over and above the normal demands of daily living is essential to the development of an efficient, strong and durable body.

Men's Exercises (5BX)

Chart 1

Exercises	Level	Exercises			
		1	2	3	4
1. Feet astride, arms upward. Forward bend to floor touching then stretch upward and backward bend. Do not strain to keep knees straight.	A	20	18	22	13
	B	14	13	16	9
	C	8	9	10	6
2. Sit-ups. Back lying, feet 6" apart, arms at sides. Sit up just far enough to see your heels. Keep legs straight, head and shoulders must clear floor.	D	4	5	6	3
	Time	2	1	1	1
3. Front lying, palms placed under the thighs. Raise head and one leg, repeat using legs alternately. Keep leg straight at the knee, thighs must clear the palms. (Count one each time second leg touches floor.)					
4. Push-up. Front lying, hands under the shoulders, palms flat on the floor. Straighten arms lifting upper body, keeping the knees on the floor. Bend arms to lower body. Keep body straight from the knees, arms must be fully extended, chest must touch floor to complete one movement.					

Chart 2

Exercises	Level	Exercises			
		1	2	3	4
1. Feet astride, arms upward. Touch floor and press (bounce) once then stretch upward and backward bend.	A	30	23	33	20
	B	26	18	27	17
2. Sit-ups. Back lying, feet 6" apart, arms at sides, knees bent. Sit up to vertical position, keep feet on floor even if it is necessary to hook them under a chair.	C	20	15	21	14
	D	16	12	15	11
	Time	2	1	1	1
3. Front lying, palms placed under things. Raise head, shoulders and both legs. Keep legs straight, both thighs must clear the palms.					
4. Push-ups. Front lying, hands under the shoulder, palms flat on the floor. Straighten arms to lift body with only palms and toes on the floor. Back straight. Chest must touch floor for each completed movement after arms have been fully extended.					

Chart 3

Exercises	Level	Exercise			
		1	2	3	4
1. Feet astride, arms upward. Touch floor 6" outside left foot, again between feet and press again once then 6" outside right foot, bend backward, as far as possible, repeat, reverse direction after half the number of counts.	A	30	32	47	38
	B	28	28	41	28
	C	26	25	35	26
	D	24	22	31	24
	Time		2	1	1
2. Sit-ups. Back lying, feet 6" apart, arms clasped behind head, knees bent. Sit up to vertical position, keep feet on floor, hook feet under chair, etc., only if necessary.					
3. Front lying, hands interlocked behind the back. Lift head, shoulders, chest and both legs as high as possible. Keep legs straight, and raise chest and both thighs completely off the floor.					
4. Push-ups. Front lying, hands under the shoulders, palms flat on floor. Touch chin to floor in front of hands.					

Chart 4

Exercises	Level	Exercise			
		1	2	3	4
1. Feet astride, arms upward. Touch floor outside left foot, between feet, press once then outside right foot, circle bend backwards as far as possible, reverse directions after half the number of counts. Keep arms above head and make full circle, bending backward past vertical each time.	A	31	40	50	42
	B	28	38	47	34
	C	26	36	44	28
	D	24	34	41	21
	Time		2	1	1
2. Sit-ups. Back lying, legs bent, feet together, arms straight overhead. Sit up and touch the toes keeping the arms and legs straight. Use chair to hook feet under only if necessary. Keep arms in contact with the sides of the head throughout the movement.					
3. Front lying, hands and arms stretched sideways. Lift head, shoulders, arms, chest and both legs as high as possible. Keep legs straight, raise chest and both thighs completely off floor.					

4. Push-ups. Front lying, palms of hands flat on floor, approximately 1 foot from ears directly to side of head. Straighten arms to lift body. Chest must touch floor for each completed movement.

Chart 5

Exercises	Level	Exercise			
		1	2	3	4
1. Feet astride, arms upward, hands clasped, arms straight. Touch floor outside left foot, between feet, press once then outside right foot, circle bend backwards as far as possible. Reverse direction after half the number of counts.	A	30	50	50	44
	B	28	48	47	40
	C	26	45	44	36
	D	24	42	41	32
	Time		2	1	1
2. Sit-ups. Back lying, legs bent, feet together, hands clasped behind head. Sit up and twist to touch right elbow to left knee. This completes one movement. Alternate the direction of twist each time. Keep feet on the floor when elbow touches knee.					
3. Front lying, arms extended overhead. Raise arms, head, chest and both legs as high as possible. Keep legs and arms straight, chest and both thighs completely off floor.					
4. Push-ups. Front lying, hands under shoulder, palms flat on floor. Push off floor and clap hands before returning to starting position. Keep body straight during the entire movement. Hand clap must be heard.					

Chart 6

Exercises	Level	Exercise			
		1	2	3	4
1. Feet astride, arms upward, hands reverse clasped, arms straight. Touch floor outside left foot, between feet, press once then outside right foot, circle bend backwards as far as possible. Reverse direction after half the number of counts. Keep hands tightly reverse clasped at all times.	A	30	60	40	40
	B	28	57	37	36
	C	26	55	34	32
	D	24	52	31	28
	Time		2	1	1
2. Sit-ups. Back lying, knees bent, feet together, hands clasped behind head. Sit up and twist to touch right elbow to left knee. This completes one movement. Alternate the direction of twist each time. Keep feet on the floor when elbow touches knee.					



3. Front lying, arms extended over head. Raise arms, head, chest and both legs as high as possible then press back once. Keep legs and arms straight, chest and both thighs completely off floor.
4. Push-ups. Front lying, hands under shoulders, palms flat on floor. Push off floor and slap chest before returning to starting position. Keep body straight during the entire movement, chest slap must be heard.

#### Women's Exercises (XBX)

Chart 1

Level	1	2	3	4	5	6	7	8	9
A	9	8	10	40	26	20	28	14	14
B	7	7	8	36	20	14	23	10	11
C	5	5	7	28	14	10	16	7	8
D	3	4	5	24	8	6	8	4	4
Time		2			2	1	1	2	1

#### Exercises

1. Toe touching. Stand erect, feet 12 inches apart, arms over head. Bend forward to touch floor between feet. Do not try to keep knees straight. Return to starting position. Each return to starting position counts one.
2. Knee raising. Stand erect, hands at sides, feet together. Raise left knee as high as possible, grasping knee and shin with hands. Pull leg toward body. Keep back straight throughout. Lower foot to floor. Repeat with right leg. Continue by alternating legs--- left then right. Left and right knee raises count one.
3. Lateral bending. Stand erect, feet 12 inches apart, hands at side. Keeping back straight, bend sideways from waist to left. Slide left hand down leg as far as possible. Return to starting position and bend to right side. Continue by alternating to left then right. Bends to the left and right count one.
4. Arm circling. Stand erect, feet 12 inches apart, arms at sides. Make large circles with left arm. Do one quarter of total count with forward circles and one quarter with backward circles. Repeat with right arm. A full arm circle counts one.

5. Partial sit-ups. Lie on back. legs straight and together, arms at sides. Raise head and shoulders from floor until you can see your heels. Lower head to floor. Each partial sit-up counts one.
6. Chest and leg raising. Lie face down, arms along sides, hands under thighs, palms pressing against thighs. Raise head, shoulders, and left leg as high as possible from floor. Keep leg straight. Lower to floor. Repeat raising head, shoulders, and right leg. Continue by alternating legs, left then right. Each chest and leg raise counts one.
7. Side leg raising. Lie on side, legs straight, lower arm stretched over head along floor, top arm used for balance. Raise upper leg 18 to 24 inches. Lower to starting position. Each leg raise counts one. Do half number of counts raising left leg. Roll to other side and do half number of counts raising right leg.
8. Push-ups. Lie face down, legs straight and together, hands directly under shoulders. Push body off floor in any way possible, keeping hands and knees in contact with floor. Sit back on heels. Lower body to floor. Each return to starting position counts one.
9. Leg lifting Lie on back, legs straight and together, arms at sides, palms down. Raise left leg until it is perpendicular to floor, or as close to this position as possible. Lower and repeat with right leg. Continue by alternating legs, left then right. Left plus right leg lifts count one.

Chart 2

Level	1	2	3	4	5	6	7	8	9
A	15	16	12	30	35	38	50	28	20
B	13	14	11	26	29	32	44	23	16
C	12	12	9	20	22	27	38	18	14
D	10	10	7	18	14	18	32	12	10
Time		2			2	1	1	2	1

Exercises

1. Toe touching. Stand erect, feet 12 inches apart, arms over head. Bend forward to touch floor between feet. Bob up and down touching floor a second time. Return to starting position. Each return to starting position counts one.

2. Knee raising. Stand erect, feet together, arms at sides. Raise left knee as high as possible grasping knee and shin with hands. Pull leg against body. Keep back straight throughout. Lower foot to floor. Repeat with right leg. Continue by alternating legs---left then right. Left and right knee raises count one.
3. Lateral Bending. Stand erect, feet 12 inches apart, hands at sides. Keeping back straight, bend sideways from waist to left. Slide left hand down leg as far as possible. Bob up a few inches and press sideways and down again. Return to starting position and repeat same movements to right side. Continue by alternating to left then right. Bends to left and right count one.
4. Arm Circling. Stand erect, feet 12 inches apart, arms at sides. Make large circles, with both arms at same time, backwards and around. Do half the number of repetitions making backward circles and half making forward circles. Each full arm circle counts one.
5. Rocking Sit-ups. Lie on back, knees bent, feet on floor, arms extended over head. Swing arms forward and at same time thrust feet forward and move to sitting position. Reach forward, trying to touch toes with fingers. Return to starting position. Each return to starting position counts one.
6. Chest and Leg Raising. Lie face down, arms along sides, palms pressing against thighs. Raise head, shoulders, and legs as high as possible from floor. Keep legs straight. Return to starting position. Each return to starting position counts one.
7. Side Leg Raising. Lie on side, legs straight, lower arm stretched over head along floor, top arm used for balance. Raise upper leg until it is perpendicular to floor or as close as possible. Lower to starting position. Each leg raise counts one. Do half number of counts raising left leg. Roll to other side and do half number of counts raising right leg.
8. Knee Push-ups. Lie face down, legs straight and together, hands directly under shoulders. Push body off floor until arms are straightened. Keep hands and knees in contact with floor. Try to keep body in straight line. Each return to starting position counts one.
9. Leg-Overs. Lie on back, legs straight and together, arms stretched sideways at shoulder level. Raise left leg to perpendicular. Drop it across body, and try to touch right hand with toes. Raise leg to perpendicular and return to starting position. Repeat same movement with right leg. Keep body and legs straight throughout, and shoulders on the floor. Each return to starting position counts one.

Chart 3

Level	Exercise								
	1	2	3	4	5	6	7	8	9
A	15	22	18	40	42	40	60	40	20
B	13	20	16	36	39	36	58	35	19
C	12	18	14	30	33	33	54	30	15
D	10	16	12	24	29	30	52	25	11
Time		2			2	1	1	2	1

Exercises

1. Toe Touching. Stand erect, feet about 16 inches apart, arms over head. Bend down to touch floor outside left foot. Bob up and down to touch floor between feet. Bob again and bend to touch floor outside right foot. Return to starting position counts one.
2. Knee Raising. Stand erect, feet together, arms at sides. Raise left knee as high as possible, grasping knee and shin with hands. Pull leg against body. Keep back straight throughout. Lower foot to floor. Repeat with right leg. Continue by alternating legs---left then right. Left and right knee raises count one.
3. Lateral Bending. Stand erect, feet 12 inches apart, right arm extended over head, bent at elbow. Keeping back straight, bend sideways from waist to left. Slide left hand down leg as far as possible, at the same time press to left with right arm. Return to starting position and change arm positions. Repeat to right. Continue by alternation to left then right. Bends to left and right count one.
4. Arm Circling. Stand erect, feet 12 inches apart, arms at sides. Make large circles with arms in a windmill action---one arm following other and both moving at same time. Do half number of repetitions making backward circles and half making forward circles. Each full circle by both arms counts one.
5. Sit-ups. Lie on back, legs bent and together, arms along sides. Keeping back as straight as possible, move to a sitting position. Slide hands along legs during this movement finally reaching forward to try to touch toes with fingers. Return to starting position. Each return to starting position counts one.
6. Chest and Leg Raising. Lie face down, legs straight and together, arms stretched sideways at shoulder level. Raise entire upper body and both legs from floor as high as possible. Keep legs straight. Return to starting position. Each return to starting position counts one.

7. Side Leg Raising. Lie on side, legs straight, lower arm stretched over head along floor, top arm used for balance. Raise upper leg until it is perpendicular to floor. Lower to starting position. Each leg raise counts one. Do half number of counts raising left leg. Roll to other side and do half number of counts raising right leg.
8. Elbow Push-ups. Lie face down, legs straight and together, elbows directly under shoulders, forearms along floor, and hands clasped together. Raise body from floor by straightening it from head to heels. In the up position, body is in a straight line and elbows, forearms, and toes are in contact with floor. Lower to starting position. Keep head up throughout. Each return to starting position counts one.
9. Leg-overs--Tuck. Lie on back, legs straight and together, arms stretched sideways at shoulder level, palms down. Raise both legs from floor, bending at hips and knees until in a tuck position. Lower legs to left, keeping knees together and both shoulders on floor. Raise legs and lower to floor on right side. Raise until perpendicular to floor and return to starting position. Keep knees close to abdomen throughout. Each return to starting position counts one.

#### Charts 4

Level	Exercise								
	1	2	3	4	5	6	7	8	9
A	15	26	15	32	28	46	58	30	16
B	13	24	14	30	42	43	52	21	13
C	12	22	12	28	35	39	46	13	10
D	10	20	10	26	29	36	38	8	7
Time		2			2	1	1	2	1

#### Exercises

1. Toe Touching. Stand erect, feet about 16 inches apart, arms over head. Bend down to touch floor outside left foot. Bob up and down to touch floor between feet. Bob again touching floor between feet once more. Bob and bend to touch floor outside right foot. Return to starting position. Each return to starting position counts one.
2. Knee Raising. Stand erect, feet together, arms at sides. Raise left knee as high as possible, grasping knee and shin with hands. Pull leg against body. Keep back straight throughout. Lower foot to floor. Repeat with right leg. Continue by alternating legs--- left then right. Left and right knee raises count one.

3. **Lateral Bending.** Stand erect, feet 12 inches apart, right arm extended over head, bent at elbow. Keeping back straight, bend sideways from waist to left. Slide left hand down leg as far as possible, at same time press to left with right arm. Bob up a few inches and press to left again. Return to starting position and change arm positions. Repeat to right. Continue by alternating to left then right. Bends to left and right count one.
4. **Arm Flinging.** Stand erect, feet 12 inches apart, upper arms extended sideways at shoulder level, elbows bent, outstretched fingers touching in front of chest. Press elbows backward and upward. Do not let elbows drop. Return arms to starting position and then fling hands and arms outward, backward, and upward as far as possible. Return to starting position. Count one after each arm fling.
5. **Sit-ups.** Lie on back, legs bent and together, hands behind head. Move to sitting position. Keep feet on floor (support may be used if necessary) and back straight. Lower body to starting position. Each return to starting position counts one.
6. **Chest and Leg Raising.** Lie face down, legs straight and together, hands behind head. Raise entire upper body and both legs from floor as high as possible. Keep legs straight. Return to starting position. Each return to starting position counts one.
7. **Side Leg Raising.** With right side to floor, support weight on right hand (arm straight) and side of right foot, using left hand for assistance in balance if necessary. Raise left leg until it is parallel with floor. Lower leg to starting position. Each leg raise counts one. Do half number of counts raising left leg. Change to other side and do half number of counts raising right leg.
8. **Push-ups.** Lie face down, legs straight and together, toes turned under, hands directly under shoulders. Push up from hands and toes until arms are fully extended. Keep body and legs in a straight line. Return to touch chest to floor and repeat. Each time chest touches floor counts one.
9. **Leg-overs---Straight.** Lie on back, legs straight and together, arms stretched sideways at shoulder level, palms down. Raise both legs until they are perpendicular to floor, keeping them straight and together. Lower legs to left, trying to touch left hand with toes. Raise to perpendicular and lower to right side. Raise again to perpendicular and return to starting position. Each return to starting position counts one.