Selectee Physical Fitness Training Guide

Getting in shape safely requires a balance of stretching, strengthening, and aerobics activity.
A good exercise program is one that you can do in your own home and one that will build your body in three areas: endurance, flexibility, and strength.

*Stephen R. Covey*

*“The Seven Habits of Highly Effective People”*
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The health and well being of federal law enforcement employees is crucial to Federal Government operations. This Guide was developed to help selectees meet the rigorous demands of the job and Training Academy. It is presented in three parts. Part One – General Stretching Exercises includes stretches from head to toe that should be performed on a regular basis. Part Two – Strengthening Exercises includes a variety of exercises to strengthen the major muscle groups of the body. Part Three – Aerobic Conditioning includes suggestions for starting a walking and running program. Appendix A shows you how to find your target heart rate zone. Additionally Appendix B contains information on proper lifting techniques to help selectees reduce the risk of back injuries.

First, some basic rules to remember:

- It is always best to consult with your physician before starting an exercise program.
- When ready, begin the exercise program very slowly. It is important to perfect the technique to ensure maximum results and to minimize injury.
- Warm up before doing any vigorous exercise. Never stretch a “cold” muscle.
- Do not over stretch. Only stretch as much as is comfortable. Overstretching or “Bouncing” a stretch can weaken joints, tendons or muscles.
- Perform the strengthening exercise 2-3 times a week and stretches 3-5 times each week. If a particular muscle group is tight, stretches may be performed daily. The aerobic conditioning program should be performed 3-5 times a week.
- Gradually increase the number and intensity of these exercises.
- You may experience some minor discomfort with any new exercise program. However, the discomfort should not linger after the exercise.
- Be patient. It may take several weeks before you start seeing results.

Note: Any neck exercise or position that causes increased or prolonged discomfort in the arms or any lower back exercises that cause increased discomfort in the legs should be stopped immediately.

The exercises within this guide are intended to be performed by a person who has no active injury or on-going disability.
PART ONE - GENERAL STRETCHING EXERCISES

Stretching is important for everyone, from the conditioned athlete to the weekend warrior. Stretching makes the muscles, ligaments and tendons more flexible and elastic-like. Rather than tearing or breaking when under strain, a flexible muscle is more likely to stretch when exercising. Flexibility prevents injuries especially to the back, Achilles tendon, ankles, knees, shoulders and other joints of the body.

Never stretch a cold muscle. It is best to warm up first by walking slowly for 5-10 minutes, stationary cycling for 5 minutes or jogging slowly for 5 minutes before stretching. Stretching is joint specific — you have to target each muscle group and joint separately. Stretch gently and do not bounce or jerk the stretch and stay just short of the pain zone while stretching. After participating in a physical exercise activity, stretch again.

The first part of this Guide is specifically designed to increase flexibility of muscles, ligaments, tendons and joints. The stretching exercises presented within this section focus on the neck, back, upper extremities, and lower extremities.
The Neck: Exercise for Increased Neck Flexibility

Chin Tuck Exercise
Slide chin straight back, keeping head level.

Side Bends
Bend the head toward the shoulder without moving the shoulders (hold stretch). Next, move your head slowly to the other shoulder (hold stretch).

Forward Bends
Bend head forward and down (hold stretch), then return to starting position and do again.

Rotation Stretch
Rotate head slowly and look over your shoulder (hold stretch) then look over the opposite shoulder (hold stretch), then return to starting position.
Perform 3-5 repetitions for each of the above neck exercises and hold each repetition for 5-20 seconds (Hold stretch longer when muscle is tight.)
Back Stretches

**Single Knee-to-Chest**
Bring one knee to your chest. Hold for 5-10 seconds, then lower the leg and bring the opposite leg to your chest. Alternate legs. Perform 5-10 repetitions prior to working out. If muscles are tight, perform daily.

**Double Knee-to-Chest**
Slowly bring both knees to your chest as shown. Hold for 5-10 seconds. Perform 5-10 repetitions prior to working out. If muscles are tight, perform daily.

**Prone Back Extension**
Raise up on your elbows as high as possible, but keep your hips flat. If comfortable, progress to pressing your upper body upward into the position shown. Hold for 5-10 seconds. Perform 5-10 repetitions prior to working out. If muscles are tight, perform daily.

**Backward Bending/Arch Backward**
Stand erect with hands on small of back. Next bend backward until you feel a gentle stretch. Hold for 5-10 seconds. Perform 5-10 repetitions prior to working out. If muscles are tight, perform daily.

**Upper and Mid Back Stretch**
Slide hands forward and buttocks back. Hold for 10-20 seconds, and perform 3-5 repetitions before working out. If muscles are tight, perform daily.
Upper Extremity Stretches

Shoulders:

Upper Shoulder and Rotator Cuff Stretch
With hands behind back, gently pull your right arm with your left hand down and behind you, tilt head to opposite side until you feel a stretch in the upper shoulder area. Repeat with right arm. Hold stretch for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Posterior Shoulder Stretch
Pull your arm (at elbow) across your chest until you feel a stretch in the back of your shoulder. Turn your head toward the shoulder being pulled. Repeat with the other arm. Hold stretch for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Chest and Anterior Shoulder Stretch:
Stand with arm extended to form a 90-degree angle with your hand gripping the doorjamb. Slowly rotate waist away from doorjamb until stretch is felt in anterior (front) chest/shoulder area. Hold stretch for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Corner Press Stretch
Stand in the corner of the room with hands on wall. Next, lean into the corner bending elbows until you feel stretch in chest muscles. Hold stretch for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.
Biceps Anterior Shoulder Stretch
With your arms behind your back, and elbows straight or locked, slowly raise arms up until stretch is felt. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Triceps Stretch
Lift your arm over and behind your head. Gently pull your elbow with the opposite hand until a stretch is felt. Repeat with the other arm. Hold stretch for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Wrist Extensor Stretch
Keep your elbow straight and grasp one hand with the other hand. Slowly bend the right hand down until a stretch is felt in the wrist. Repeat with the opposite hand. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Wrist Flexor Stretch
Keep your elbow straight and grasp one hand with the other hand. Slowly bend the hand up until a stretch is felt at the wrist. Repeat with the opposite hand. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.
LOWER EXTREMITY STRETCHES:

**Hip External Rotators Stretch**

Lie on your back, keeping your shoulders flat on the floor. Pull the right leg at the knee across the left leg toward the floor until you feel the stretch in your right hip. Repeat with the other leg. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

**Hip Flexor Stretch**

Slowly slide your pelvis downward while moving your shoulders and chest backward until you feel a stretch in the front of your hips/pelvic area. Repeat with the opposite leg behind. Hold for 10-20 seconds, and perform this stretch 3-5 repetitions prior to working out. If muscles are tight, perform daily.

**Alternate Method**

Lie on table and bring one knee to your chest; slowly lower the opposite leg off table and down toward floor. You should feel a stretch in the upper leg/groin area. Repeat with the other leg. Hold for 10-20 seconds, and perform this stretch 3-5 repetitions prior to working out. If muscles are tight, perform daily.

**Hip/Quadricep Stretch**

Stand and pull your foot toward your buttocks until a stretch is felt in the front of the thigh. Repeat with the other leg. Support yourself by holding onto a table or chair. Hold for 10-20 seconds, and perform this stretch 3-5 repetitions prior to working out. If muscles are tight, perform daily.

**Hamstring Stretch**

(lying on back)

Lie on your back. Support the back of your thigh behind the knee with your hands. Start with the knee bent. Then slowly straighten your leg toward the ceiling until a comfortable stretch is felt in the back of the thigh. Repeat with the other leg. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.
Hamstring Stretch (seated)
While seated, place your hands on your lower leg and gently pull your head toward your knee. Repeat with other leg. Hold stretch for 10-20 seconds, and perform 3-5 repetitions. If muscles are tight, perform daily.

Hamstring Stretch (standing)
Stand with one leg on table. Slowly lean forward until a stretch is felt in the back of the thigh. Repeat with the other leg. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Iliotibial Band Stretch
Cross your right leg behind your left leg. Bend your right hip toward the wall and slightly bend your left knee. Keep your right knee straight. You should feel a stretch on the outside aspect of your right knee/leg. Repeat with the other leg. Hold stretch for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Calf Stretch
Stand with your hands on wall and left foot 2-3 feet in front of your right foot. Keeping your right leg straight, with heel on floor and turned slightly outward, lean into the wall until a stretch is felt in the calf. Repeat with the other leg. Hold for 10-20 seconds and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.

Groin - Muscle Stretch
Sitting erect push your knees to the floor until a stretch is felt. Hold for 10-20 seconds, and perform 3-5 repetitions prior to working out. If muscles are tight, perform daily.
**PART TWO - STRENGTHENING EXERCISES:**

*In the second section* of the Guide, strengthening exercises are illustrated using isometric and calisthenic techniques or the use of an elastic band. These exercises can be supplemented by a more rigorous routine using free weights or isokinetic equipment often found in a fitness center. The exercises are separated into the following areas: neck, back/abdominal, upper extremity, and lower extremity.

All strengthening exercises should be performed no more than three times per week unless under the direction of a physician for rehabilitation purposes or alternating muscle groups. Example: work upper extremity muscle groups on Monday, Wednesday and Friday and rest this group on Tuesday, Thursday and Saturday but do the lower extremity muscle groups on the latter days.

All strengthening exercises should be performed two to three times a week with a one-day rest between. *When lifting weights, a 48-hour rest is necessary between workouts. Muscles need time to recover from a strength training session.*

**Neck:**

**Isometric Lateral Neck Bend**

With the palm of your hand apply light pressure to the side of your head just above the ear. Resist bending head sideways toward your shoulder. Hold the pressure 3-5 seconds and perform 1-3 sets of 8-10 repetitions. Repeat on the other side.

**Isometric Neck Extension**

With the palm of your hand apply light to moderate pressure to the back of your head as you press your head backward into your hand. Hold the pressure 3-5 seconds and perform 1-3 sets of 8-10 repetitions.

**Isometric Neck Flexion**

With the palm of your hand apply light to moderate pressure to your forehead as you press your head forward. Hold the pressure 3-5 seconds and perform 1-3 sets of 8-10 repetition.
Isometric Neck Rotation
With the palm of your hand apply light to moderate pressure to temple. Turn your head toward your hand while resisting it. Hold the pressure 3-5 seconds and perform 1-3 sets of 8-10 repetitions. Repeat to the other side.

**BACK/ABDOMINAL STRENGTHENING:**

Back/Adominal Strengthening

Pelvic Tilt
Lie down with your knees bent and feet flat on the floor/table. Slowly rotate the pelvis up and flatten your low back curve (toward the floor/table) by tightening the abdominal muscle and buttocks. Perform 5-10 repetitions and hold 3-5 seconds. Perform daily.

Partial Sit-up
Lie down with your knees bent and feet flat on the floor/table. Fold arms across your chest, tighten the abdominal muscles and raise your head and shoulders slightly off floor/table. Start by doing 10 repetitions and increase repetitions to a comfortable level (20-30). Can be done daily.

Partial Oblique Curl-up
Lie down with your knees bent and feet flat on the floor/table. Fold arms across your chest, tighten the abdominal muscles and raise your right shoulder and head from the floor/table and rotate trunk toward opposite side. Start by doing 10 repetitions and increase repetitions to a comfortable level (20-30). Can be done daily.

Alternate Arm and Leg Lift
(Back, Hip extensor, and Shoulder strengthening)
Lie on stomach and raise your arm and the opposite leg 6-10 inches off floor/table. Alternate sides (right arm, left leg then left arm, right leg). Start by doing 10 repetitions each and increase repetitions to a comfortable level. Perform 2-3 times a week. Hand and leg weights may be added to increase resistance.
Advanced Method (Back, Hip extensor, and Shoulder strengthening)
Perform exercise on all fours alternating arms and legs.

Press-up/Push-up (Chest strengthening)
Lie on stomach and raise trunk up off the floor with arms fully extended. Keep pelvis on floor. Start by doing 5-10 repetitions and increase repetitions to a comfortable level. Perform 2-3 times a week. Advance by doing full push-up with trunk fully extended and pelvis off floor (not shown).

Wall Sitting For Back, Hip, and Knees
Lean back against the wall and feet approximately 16-24 inches away from the base of the wall and shoulder width apart. Slowly slide buttocks down toward floor until thighs are parallel to the floor. Keep shoulders and back against wall. Do 10 repetitions and hold each 10 seconds. Perform this exercise 2-3 times a week. Do not exceed 90 degree bend in knees.

Shoulder:  
Shoulder Flexion
Secure one end of the elastic band to fixed object. While holding the elastic band in hand, raise arm out in front of you, lifting it to shoulder level with your elbow slightly bent. As you stretch the band, it will give you resistance and strengthen your shoulder muscles. Alternate method (not shown): raise your arm using a weight in your hand instead of elastic band. Remember to keep your elbow slightly bent. Either method: perform 1-3 sets of 10 repetitions holding each for 3 seconds. Repeat with your opposite arm. Do this exercise 2-3 times a week.
Shoulder Abduction
Secure one end of the elastic band to fixed object. Hold elastic band with your hand, then raise your arm out to the side to shoulder level and keep elbow slightly bent. Alternate method (not shown): raise arm while holding a weight in your hand instead of elastic band. Either method: perform 1-3 sets of 10 repetitions holding each for 3 seconds. Repeat with your opposite arm. Do this exercise 2-3 times a week.

Shoulder Adduction
Secure one end of the elastic band to fixed object. With your arm extended out to your side, pull your arm down and in toward your side. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite arm. Do this exercise 2-3 times a week.

Shoulder Extension
Secure one end of the elastic band to fixed object and pull (extend) your arm back behind you. Keep your elbow slightly bent. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds. Repeat with your opposite arm. Do this exercise 2-3 times a week.

Shoulder Horizontal Abduction
Secure one end of the elastic band to a fixed object and pull your arm across your chest to the other side. Keep your elbow slightly bent. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite arm. Do this exercise 2-3 times a week.
Shoulder Horizontal Adduction
Secure one end of the elastic band to fixed object. Starting with your arm ab ducted out to your side at shoulder level, pull elastic band across your chest to your opposite shoulder. Elbow should be slightly bent. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds. Repeat with your opposite arm. Do this exercise 2-3 times a week.

Shoulder External Rotation
Secure one end of the elastic band to fixed object. With your elbow bent to 90 degrees and tucked against your side, rotate arm out away from body. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite arm. Do this exercise 2-3 times a week.

Shoulder Internal Rotation
Secure one end of the elastic band to fixed object. With your elbow bent at 90 degrees and tucked against your side, rotate your hand inward to your midriff. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite arm. Do this exercise 2-3 times a week.

Elbow Flexion
Fasten elastic band to leg or foot. Flex your elbow from a 90 degree position toward your shoulder. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your other elbow. Do this exercise 2-3 times a week.
**Elbow Extension**
Fasten elastic band to fixed object behind you at shoulder height. With your shoulder and elbow flexed to 90 degrees, extend your elbow until it is parallel to the floor. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your other arm. Do this exercise 2-3 times a week.

![Elbow Extension Image]

**Wrist Flexion**
While sitting, step on one end of the elastic band and firmly hold the other end. With your wrist facing up and your elbow on thigh, bend your wrist up as shown. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your other wrist. Do this exercise 2-3 times a week.

![Wrist Flexion Image]

**Wrist Extension**
While sitting, step on one end of the elastic band and firmly hold the other end. With your wrist facing down and your elbow resting on thigh, bend your wrist up as shown. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite wrist. Do this exercise 2-3 times week.

![Wrist Extension Image]

**Wrist-Radial Deviation**
While sitting, step on one end of the elastic band and firmly hold the other end. With your thumb facing up and your elbow resting on thigh, bend your wrist up as shown. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite wrist. Do this exercise 2-3 times a week.

![Wrist-Radial Deviation Image]

**Wrist-Ulnar Deviation**
Secure one end of the elastic band to fixed object and firmly hold other end. With your shoulder and elbow flexed to 90 degrees, extend your wrist as shown. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite wrist. Do this exercise 2-3 times a week.

![Wrist-Ulnar Deviation Image]
**Quadriceps Strengthening**
Secure one end of the elastic band to fixed object and the other to your ankle. With your back to the fixed object, lift your leg forward and keep your knee straight. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite leg. Do both legs 2-3 times a week.

**Hip Extensors Strengthening**
Secure one end of the elastic band to fixed object and the other around your ankle. Face the fixed object and extend your leg backward. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite leg. Do both legs 2-3 times a week.

**Hip Abductors Strengthening**
Secure one end of the elastic band to fixed object and the other to your ankle. Standing sideways from fixed object, lift your leg out to the side. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite leg. Do both legs 2-3 times a week.

**Hamstring Curl**
Secure one end of the elastic band to fixed object. Lie on your stomach with the elastic band around your ankle, and bend your knee. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite leg. Do both legs 2-3 times a week.
**Calf Strengthening**  
With elastic band around your foot, hold opposite end and press foot toward floor. Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite leg. Do both legs 2-3 times a week.

**Alternate Method**  
Stand on one leg, then lift heel off floor (may hold hand weights for added resistance). Perform 1-3 sets of 10 repetitions holding each repetition for 3 seconds each. Repeat with your opposite leg. Do both legs 2-3 times a week.
PART THREE - AEROBIC CONDITIONING PHASE

The third part of this Guide and maybe the most important is an introduction to aerobic conditioning. Presented here is a beginning walking and running program. A myriad of aerobic programs exist and a comprehensive analysis of them is beyond the scope of this guide. Other aerobic condition programs such as cycling, swimming, aerobic dancing, stationary cycling, stair climbing, rope skipping, rowing, and cross-country skiing can be found in hundreds of reference books or on the Internet.

The first step in starting an exercise program, especially an aerobic program, is getting a medical examination.

If over 40, you should have a stress test with an electrocardiogram to see how your heart performs under exercise conditions.
The National Heart, Lung, and Blood Institute reports that it is never too late to start exercising. Studies show exercise can greatly reduce blood pressure, boost cardiovascular health, strengthen muscles, improve metabolism, elevate mood, and maintain mental functioning. Walking for fitness is inexpensive, requires little previous experience, and is convenient.

**Getting Started with a Walking Program**

Choose a time of day: To be successful, find the best time to walk and then stick with that schedule. Ideally, walking 30-40 minutes daily will achieve most of the benefits listed above. However, several 10-15 minute walks during the day also achieve similar benefits.

Find a place to walk: Find a course with a smooth, soft surface away from traffic. If weather is an issue, try an indoor track or walk inside a shopping mall.

Dress appropriately: Select loose, comfortable clothing that is suited to the weather. To get started, all you need is a good pair of shoes. (Note: It is best to buy your shoes in the late afternoon when your feet tend to be slightly swollen. You should have a good cushion, ample toe room, and a snug heel fit.)
**Warm up:** Warm up by walking slowly for 5 minutes and then stretch for about 5 minutes to limber up your legs and back.

**Walk:** See suggested walking program below.

**Stay Motivated:**
- Find a walking buddy.
- Mix it up. Avoid a walking rut by varying the length of your walks, trying different paths, or different buddies.
- Set a performance goal. Do not start out by walking 30 or 40 minutes. A 10-minute walk is always a good start, but gradually increase it. A long-term goal may include hiking a trail in a national park.
- Record your progress. Looking back on your progress can be a great motivational tool.

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**WALKING PROGRAM**

There are several beginning walking programs out there. The following Sample Walking Program was developed by the National Institutes of Health.

<table>
<thead>
<tr>
<th>Week</th>
<th>Warm-up</th>
<th>Target Zone</th>
<th>Cool-Down</th>
<th>Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Normal walk 5 min.</td>
<td>Brisk walk 5 min.</td>
<td>Normal walk 5 min.</td>
<td>15 min.</td>
</tr>
<tr>
<td>Session A</td>
<td>Normal walk 5 min.</td>
<td>Brisk walk 5 min.</td>
<td>Normal walk 5 min.</td>
<td>15 min.</td>
</tr>
<tr>
<td>Session B</td>
<td>Normal walk 5 min.</td>
<td>Brisk walk 5 min.</td>
<td>Normal walk 5 min.</td>
<td>15 min.</td>
</tr>
<tr>
<td>Session C</td>
<td>Normal walk 5 min.</td>
<td>Brisk walk 5 min.</td>
<td>Normal walk 5 min.</td>
<td>15 min.</td>
</tr>
</tbody>
</table>

Continue with at least three (3) exercise sessions during each week of the program. If you find a particular week’s pattern tiring, repeat it before going on to the next pattern. You do not have to complete the walking program in 12 weeks.

| Week 2 | Normal: 5 min. | Brisk: 7 min. | Normal: 5 min. | 17 min. |
| Week 3 | Normal: 5 min. | Brisk: 9 min. | Normal: 5 min. | 19 min. |
| Week 4 | Normal: 5 min. | Brisk: 11 min. | Normal: 5 min. | 21 min. |
| Week 5 | Normal: 5 min. | Brisk: 13 min. | Normal: 5 min. | 23 min. |
| Week 6 | Normal: 5 min. | Brisk: 15 min. | Normal: 5 min. | 25 min. |
| Week 7 | Normal: 5 min. | Brisk: 18 min. | Normal: 5 min. | 28 min. |
| Week 8 | Normal: 5 min. | Brisk: 20 min. | Normal: 5 min. | 30 min. |
| Week 9 | Normal: 5 min. | Brisk: 23 min. | Normal: 5 min. | 33 min. |
| Week 10 | Normal: 5 min. | Brisk: 26 min. | Normal: 5 min. | 36 min. |
| Week 12 | Normal: 5 min. | Brisk: 30 min. | Normal: 5 min. | 40 min. |

**Week 13 and on...** Gradually increase your brisk walking time to 50 to 60 minutes, three to five times a week. Remember that your goal is to get the benefits you are seeking and enjoy your activity. **NEVER EXCEED YOUR MAXIMUM TARGET HEART RATE.**

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*min. = minutes* For information on target heart rates, go to the Appendix A

**Remember:**
- Start slowly, maintain good posture, keep your foot swing natural, pace yourself, and swing your arms.
- Drink plenty of fluids. It takes about six to eight glasses of water to replace normal fluid loss each day and will require greater levels if participating in aerobic events or exercising in warm weather.
- To assess how much fluids you should drink a day check the Hydration Calculator at: [http://nutrition.about.com/library/blwatercalculator.htm](http://nutrition.about.com/library/blwatercalculator.htm)

*Note: This site may change, so use search engine and look up: “hydration calculator”*
AN ALTERNATIVE - WALKING PROGRAM

The 10,000 Step Program. The U.S. Surgeon General reports that a minimum of 30 minutes of moderate physical activity, such as brisk walking, on most days of the week can produce long-term health benefits. The President’s Council on Physical Fitness and Sports recommends at least 30 minutes a day, on 5 or more days a week, or 10,000 steps daily measured by a pedometer. Not everyone can achieve 10,000 steps a day, but almost everyone can find ways to build walking into each day to accumulate at least 30 minutes of physical activity. If you can’t walk for 30 minutes at one time, take 5–, 10–, or 15–minute walks throughout the day. It all adds up to better health.

In the normal course of a day, just living and working, we take 900 to 3,000 steps without intentionally going out for a walk. You probably walk more than you think and will be surprised at how quickly the steps add up! Walk everywhere. Take the stairs instead of riding the escalator, take a walk with the family after dinner, choose the farthest spot in the parking lot from work - look for ways to increase your walking.

Here are a few things to remember:

- To avoid injury, you need to build up your walking slowly. If you have any joint problems in the lower extremities, discuss your exercise plans with your physician.
- You will need a good pair of sneakers with plenty of cushion.
- Wear the pedometer everyday for two weeks and don’t do anything to change your normal routine. Everyday, keep a log of the number of steps you walked, and do this for two weeks.
- If you feel comfortable, take the highest number of steps you have walked in the two-week period and use that number of steps as your daily step goal for the next two-weeks.
- After this period, increase the number of steps you feel comfortable doing. Generally, do not increase more than 500 steps on any given day.
- Continue in that manner, working up as slowly as you feel you are able, until you reach the goal of 10,000 steps a day.
- If you experience any physical problems or pain while walking, check with your physician.
- Stay the course. It takes about six months to form a new healthy habit.

For more information on walking programs, visit www.fitness.gov.
GETTING STARTED WITH A RUNNING PROGRAM:

The first step is to get a medical exam. The information on beginning a running program is to help you get started and by no means is a scientifically-proven method. It is not a prescription, but just advice on what has worked for others. Everyone is different, and you may need to alter the program to fit your physical condition. You should avoid any exercise or program that you believe carries the risk of injury. Listen to your doctor and your body.

When ready:
Have a plan and a goal: e.g., 10-12 week training program with a goal of a 20-30 minute run. Choose a Time of Day: To be successful, find the best time to run and then stick to it. You will need 30-40 minutes.

Find a Place to Run: A high school track is always a good place to begin. You need an even surface that is not pitted or has high volumes of traffic.

Dress appropriately:
You will need good shoes. Find a shoe store where the salespeople are runners. It is best to buy your shoes in the late afternoon when your feet tend to be slightly swollen. You should have a good cushion, ample toe room, and a snug heel fit. A good salesperson can help analyze your gait to determine if you overpronate your foot or have other abnormalities.

Warm up:
Always stretch, especially the lower extremities and back. Then warm-up by walking slowly. After the run, always cool down by walking and stretching again.
Run:
See suggested running program.

Stay Motivated:
Mix it up. Try different paths. Vary the time of day. Run alone and with friends. Set a performance goal and stick with it. Gradually increase your running to meet it. Increasing intensity too fast increases the risk of injury. Record your progress. Looking back on your progress can be a great motivational tool.

Remember:
Start slowly, maintain good posture, keep your foot swing natural, pace yourself, and swing your arms. Drink plenty of fluids. It takes about six to eight glasses of water to replace normal fluid loss each day and will require greater levels if participating in aerobic events or exercising in warm weather. Weather Channel has a Hydration Calculator.

The following running program is not a scientifically–proven program, but may help you get started. You may need to adjust it to fit your physical condition. Prolonged running may cause injuries, especially if done incorrectly and without a proper warm-up. Running also has its proven benefits, i.e., strengthening the cardiovascular system and reducing the risks of osteoporosis. Good Luck!
RUNNING PROGRAM

The first 2 weeks of this program gets the non-runner/athlete in condition to start a running program by walking. If you can comfortably walk 30 minutes, then start at Week 1 of running program. You can repeat the walking program for several weeks until you feel your legs are ready to start the next phase (running).

WALKING PHASE OF PROGRAM

<table>
<thead>
<tr>
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20 min.  
20 min.  
20-25 min. |
| Session 1 | | | | |
| Session 2 | | | | |
| Session 3 | | | | |
| Session 4 | | | | |

Continue with at least 4 walk/run sessions during each week of the program. Rest three (3) days. Example: run Monday, Wednesday, Friday and Saturday and rest Sunday, Tuesday and Thursday. If you find a particular week’s pattern tiring, repeat it before going on to the next pattern. You do not have to complete the running program in 10 weeks. Distance does not matter.

<table>
<thead>
<tr>
<th>Week</th>
<th>Running Program</th>
<th>Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Run 2 minutes, walk 4 minutes and do 5 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 2</td>
<td>Run 3 minutes, walk 3 minutes and do 5 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 3</td>
<td>Run 5 minutes, walk 2.5 minutes and do 4 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 4</td>
<td>Run 7 minutes, walk 3 minutes and do 3 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 5</td>
<td>Run 8 minutes, walk 2 minutes and do 3 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 6</td>
<td>Run 9 minutes, walk 2 minutes and do 2 cycles; finish with an 8-minute run</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 7</td>
<td>Run 9 minutes, walk 1 minute and do 3 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 8</td>
<td>Run 13 minutes, walk 2 minutes and do 2 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 9</td>
<td>Run 14 minutes, walk 1 minute and do 2 cycles</td>
<td>30 min.</td>
</tr>
<tr>
<td>Week 10</td>
<td>Run 30 minutes</td>
<td>30 min.</td>
</tr>
</tbody>
</table>

Before running, always stretch, especially the lower extremities and back. Then warm-up by walking slowly. After running, always cool down by walking and stretching again.

Gradually increase your running time. Do not worry about distance. The pace you set should be comfortable and you should be able to carry on a conversation without being short of breath. NEVER EXCEED YOUR MAXIMUM TARGET HEART RATE (see Appendix A).
**APPENDIX A**

**TARGET HEART RATE**

To achieve benefits from any aerobic exercise program, it is important to maintain a sufficiently high heart rate during your exercise and achieve beneficial cardiovascular change. The minimum rate the heart should beat to achieve cardiovascular change is your target heart rate. Below is a chart that was developed by the National Heart, Lung, and Blood Institute, which is part of the National Institutes of Health. The chart shows a Target Zone that your heart should beat during exercise to achieve an aerobic conditioning effect or beneficial cardiovascular change.

<table>
<thead>
<tr>
<th>AGE</th>
<th>TARGET HEART RATE ZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years</td>
<td>100–150 beats per minute</td>
</tr>
<tr>
<td>25 years</td>
<td>98–146 beats per minute</td>
</tr>
<tr>
<td>30 years</td>
<td>95–142 beats per minute</td>
</tr>
<tr>
<td>35 years</td>
<td>93–138 beats per minute</td>
</tr>
<tr>
<td>40 years</td>
<td>90–135 beats per minute</td>
</tr>
<tr>
<td>45 years</td>
<td>88–131 beats per minute</td>
</tr>
<tr>
<td>50 years</td>
<td>85–127 beats per minute</td>
</tr>
<tr>
<td>55 years</td>
<td>83–123 beats per minute</td>
</tr>
<tr>
<td>60 years</td>
<td>80–120 beats per minute</td>
</tr>
<tr>
<td>65 years</td>
<td>78–116 beats per minute</td>
</tr>
<tr>
<td>70 years</td>
<td>75–113 beats per minute</td>
</tr>
</tbody>
</table>

Here is how to check if you are within your target heart rate:

1. Right after you stop moving, take your pulse: place the tips of your first two fingers lightly over one of the blood vessels on your neck, just to the left or right of your Adam’s apple. Or try the pulse spot inside your wrist just below the base of your thumb.

2. Count your pulses for 10 seconds and multiply the number by 6. Compare the number to the correct grouping above: look for the age grouping that is closest to your age and read the line across. For example, if you are 43, the closest age on the chart is 45; the target zone is 88–131 beats per minute.

Note: Never exceed your maximum target heart rate unless cleared by your physician.

Check your pulse periodically to see if you are within your target zone. If you are below your target rate zone, speed up your pace. If you are above your target rate zone, slow down your pace. As you get more in shape, try to be within the upper range of your target zone.
Improper lifting techniques may cause muscle strain and stress in ligaments of the back. They could also cause serious injuries to the spinal discs, especially in the lower back.

Think Before Lifting

Is the object too heavy for one person? Is it awkward? When lifting, it is important to maintain the natural curves in your spine throughout the lifting process. Bend only at the knees and hips, not the back. Keep the object close to your body after lifting to reduce the effect of gravity and stress on your spine. In addition, consider using dollies and carts or ask another person to help you move an object safely. If a lot of lifting is necessary, rest and stretch frequently.

Correct Lifting Techniques

- Keep feet shoulder width apart.
- Keep your abdominal muscles tight before and during the lift.
- Squat down by bending your knees and hips.
- Keep your spine in line and maintain your lumbar (lower back) curve.
- Keep the object close to you (an object held 2 feet away from your body multiplies the pressure on your lower back by 10).
- Keep your body straight while lifting; do not twist or bend sideways. Think about the direction of the lift and pivot instead of twisting.
Back injuries can be avoided or minimized if you learn to maintain good spinal alignment and follow the lifting technique described. Remember: Never bend over at the waist when lifting.

**Correct Techniques for Lifting an Object Above Shoulder Level**

- Keep your feet shoulder width apart with one foot slightly in front.
- Keep your elbows pointed toward the floor and turned outward.
- Use a stool to reach above shoulder level.
- Keep the object close to your body.
- Keep your spine straight and your stomach muscles tight (do not arch your back).
- **THINK!**
Selectees for CBP and ICE law enforcement positions are required to pass rigorous physical training requirements at the Academy and must keep themselves physically fit throughout their career. As a result, it is critical that you continue to work out throughout the time you are waiting to attend the Academy. Those who fail to do so, not only pose a risk to themselves and others, but may be terminated from employment with the Department of Homeland Security.

The human body is just another part of the universe that is meant to be in perfect balance. We have been constructed in such a way that we need just so much exercise, no more and no less... where there is a lack of balance, there is also a lack of personal well-being.

Kenneth H. Cooper M.D.,M.P.H.
Author of Aerobics
U.S. Customs and Border Protection
Medical and Fitness Branch

Building a physically fit workforce through Preemployment Fitness Testing
Staying fit requires balance of stretching, strengthening and aerobic conditioning