# United States Marshals Service
# FIT Readiness Program

United States Marshals Service
Training Division, National Training Academy

## Purpose:

The objective of the United States Marshals Service FIT Readiness Program is to provide a comprehensive package to assist in assessing physical readiness, provide wellness resources and education on mitigating overuse injuries. The program focuses on utilizing the FITT principle. Upon completion of the self-assessment test, corresponding workouts, recovery breathing techniques and wellness information is available to enhance understanding and ability to improve physical wellbeing.

## Medical Disclaimer:

Prior to completing the self-assessment and program workouts, personnel should be medically cleared.

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# FITT PRINCIPLE

**FITT Principle: Frequency, Intensity, Time, Type**

**Frequency:** How often you exercise
**Intensity:** How hard you exercise
**Time:** How long you exercise
**Type:** What kind of exercise you perform

**Principals to keep in mind:** F x I x T x T= Likelihood of injury rises if you are increasing all elements above simultaneously or in conjunction with one another without optimal recovery.

## FITT principle explained:

**Frequency:** How often you participate in the physical activity, such as the number of days per week you are working out. This portion is commonly considered the foundation of your workout program.

**Intensity:** An indicator of how hard you're working. In other words, your rate of perceived exertion (or RPE) plays a role in determining the intensity of your workout.

Some people use the talk test. If you can barely speak a word or short phrase such as stating your name while exercising, then you're likely reaching your max intensity level. In comparison, if you can easily maintain a conversation, then the workout is on the lighter side of the sale. Intensity is often described as low, moderate, or high.

Calculate your maximum heart rate by using the following formula:

220-your age= max heart rate

Intensity Categories:

Low: 40-50% of your maximum heart rate
Moderate: 50-70% of your maximum heart rate
High: 70-90% of your maximum heart rate

**Time**: This refers to the duration portion of your workout session.

**Type:** This refers to the specific workout activity such as running, rowing or calisthenics (body weight movements).

## How to use the FITT Principle

Switching just one or two elements every 6 to 8 weeks gives you time to make progress with a particular routine while mitigating risk for injury. For example, maintaining your frequency, time, and type while varying your intensity will allow you to progress over time while minimizing risk of injury.

The FITT Principle is the cornerstone ideology of this workout program and will be referred to throughout to emphasize its importance. ***To increase your fitness level and reduce your likelihood for injury these elements need to be constantly assessed.***

# Self-Assessment FIT Guide

**Self-Assessment components include the following and should be completed in the order listed:**

Maximum effort push-ups
Floor touch test
Forearm Plank for time
3 Mile run for time

**Instructions:** Complete all four components of the self-assessment test in the order prescribed and record your totals on the scoring assessment chart. Your total assessment score will determine your program phase category. Follow the program and track your progress using the scoresheets. Schedule your self-assessment in the allotted timeframe as recommended.

**Frequency of Assessment:**

| Potential report date to Training Division | Self-Assessment Frequency |
|---|---|
| Within 30 days | One self-assessment is sufficient to provide a baseline |

This allows you to build your overall fitness, likelihood to progress in your next self-assessment, time to recovery all while minimizing risk for common overuse injuries. If you are a candidate and your report date to the Training Division is **beyond 30 days or unknown,** repeat the self-assessment approximately **every 45 days.**

**Assessment Scoring:**

Each component has a corresponding rating chart for measurement purposes. The total assessment score is a synopsis of all components with a maximum total of 40 points. You will record your score of each component on an assessment scoresheet.

Maximum effort push-ups: Age brackets for 10-year periods, gender is differentiated
Floor touch test: Age and gender are not factored within measurements
Forearm Plank for time: Age and gender are not factored within measurements
3 Mile run for time: Age brackets for 10-year periods, gender is differentiated

## MAXIMUM EFFORT PUSH-UPS

Purpose: Measures muscular strength and endurance of the upper body.

Component description: You have an unlimited time to complete a maximum amount of USMS FIT Standard push-ups. Hands are placed shoulder width apart, fingers pointed forward and feet together. Keep your back straight during the movement. When lowering your body to the floor make contact with an object that is approximately 3 inches in size, such as a fist, sponge, or tennis ball. Engage your core throughout the movement to ensure you are maintaining proper positioning.

If you fail to lock the elbows completely the repetition will not count, but you are permitted to continue. You are **not** permitted to rest at any time as this is a continuous movement. If you are in the up position (elbows extended) for more than two (2) seconds, you are to stop the exercise and record the number you have completed.

Common form issues: Elbows not locking when in full extension. Lowering hips towards the floor which breaks the positioning that is required to be maintained.

## FLOOR TOUCH TEST

Purpose**:** Measures the flexibility of the lower back and hamstring muscles.

Component description: Start by standing in an upright position, while bare foot (socks are permissible), hands by your sides and feet shoulder-width apart. When ready slowly lean forward, bending at your waist, keeping your knees straight. With open palms have your hands touch the floor with the goal to maintain the position for 10 seconds.

If someone can proctor, they are permitted to hold the knees straight to prevent any bending.

Common form issues: Bouncing and jerking is not permitted within this movement. Bending the knees is not allowed at any time.

## FOREARM PLANK FOR TIME

Purpose: Measures the control and endurance of the back/core stabilizing muscles.

Component description: This must be performed on a flat and level surface. Feet should be placed no more than hips width apart. Hips are to remain off the floor/ground for the entire test. Elbows should be aligned directly below the shoulders at a 90-degree angle between the forearm and upper arm. Forearms are to be angled inward.

Hands must be in a fist with the pinky side of the hand touching the ground. The neck should be kept in a neutral position (face looking down towards the ground). The back, buttocks and legs should be straight from head to heels and must remain so throughout the test.

Hands are not permitted to be clasped together or touch at any time. Throughout the exercise, the hips can only lower once (breaking the plank position). After the positioning breaks again you are to stop the exercise and record your time.

Common form issues: If proctor or person conducting assessment observes form is breaking there is one warning provided (such as the hips are lowering, this is your one warning).

## 3 MILE RUN FOR TIME

Purpose: Measures aerobic fitness.

Component description: Complete a 3-mile run for time outdoors on a relatively flat surface such as blacktop/asphalt road which is free of debris. GPS watches and/or running applications that provide pace updates regularly are not recommended to be used for the initial assessment. It is recommended you take the assessment with no GPS watch and/or running applications that provide pace updates at least every other assessment.

## SELF-ASSESSMENT SCORING TABLE: MAXIMUM EFFORT PUSH-UPS

### Mens Max Push-Ups

| | Rating | Amount | Points |
|---|---|---|---|
| 20 -29 YRS | Superior | 71+ | 10 |
| | Excellent | 68-70 | 9 |
| | Good | 65-67 | 8 |
| | Fair | 62-64 | 7 |
| | Minimum | 59-61 | 6 |
| | Poor | 56-58 | 5 |
| | Very Poor | 55 | 4 |
| | * | 52-54 | 3 |
| | ≠ | 49-51 | 2 |
| | ◊ | 46-48 | 1 |
| | ± | 45 and under | 0 |
| 30 -39 YRS | Superior | 65+ | 10 |
| | Excellent | 62-64 | 9 |
| | Good | 59-61 | 8 |
| | Fair | 56-58 | 7 |
| | Minimum | 55 | 6 |
| | Poor | 52-54 | 5 |
| | Very Poor | 49-51 | 4 |
| | * | 46-48 | 3 |
| | ≠ | 43-45 | 2 |
| | ◊ | 40-42 | 1 |
| | ± | 41 and under | 0 |
| 40 -49 YRS | Superior | 46+ | 10 |
| | Excellent | 43-45 | 9 |
| | Good | 40-42 | 8 |
| | Fair | 37-39 | 7 |
| | Minimum | 34-36 | 6 |
| | Poor | 31-33 | 5 |
| | Very Poor | 30 | 4 |
| | * | 26-29 | 3 |
| | ≠ | 22-25 | 2 |
| | ◊ | 19-21 | 1 |
| | ± | 20 and under | 0 |
| 50 -59 YRS | Superior | 36+ | 10 |
| | Excellent | 34-35 | 9 |
| | Good | 32-33 | 8 |
| | Fair | 30-31 | 7 |
| | Minimum | 26-29 | 6 |
| | Poor | 24-25 | 5 |
| | Very Poor | 22-23 | 4 |
| | * | 20-21 | 3 |
| | ≠ | 19 | 2 |
| | ◊ | 18 | 1 |
| | ± | 17 and below | 0 |

### Womens Max Push-Ups

| | Rating | Amount | Points |
|---|---|---|---|
| 20 -29 YRS | Superior | 42+ | 10 |
| | Excellent | 39-41 | 9 |
| | Good | 36-38 | 8 |
| | Fair | 32-35 | 7 |
| | Minimum | 28-31 | 6 |
| | Poor | 24-27 | 5 |
| | Very Poor | 23 | 4 |
| | * | 20-22 | 3 |
| | ≠ | 17-19 | 2 |
| | ◊ | 14-16 | 1 |
| | ± | 13 and under | 0 |
| 30 -39 YRS | Superior | 36+ | 10 |
| | Excellent | 32-35 | 9 |
| | Good | 28-31 | 8 |
| | Fair | 24-27 | 7 |
| | Minimum | 23 | 6 |
| | Poor | 20-22 | 5 |
| | Very Poor | 17-19 | 4 |
| | * | 14-16 | 3 |
| | ≠ | 13 | 2 |
| | ◊ | 12 | 1 |
| | ± | 11 and under | 0 |
| 40 -49 YRS | Superior | 26+ | 10 |
| | Excellent | 23-25 | 9 |
| | Good | 20-22 | 8 |
| | Fair | 17-19 | 7 |
| | Minimum | 15-16 | 6 |
| | Poor | 13-14 | 5 |
| | Very Poor | 12 | 4 |
| | * | 11 | 3 |
| | ≠ | 10 | 2 |
| | ◊ | 9 | 1 |
| | ± | 8 and under | 0 |
| 50 -59 YRS | Superior | 20+ | 10 |
| | Excellent | 18-19 | 9 |
| | Good | 16-17 | 8 |
| | Fair | 14-15 | 7 |
| | Minimum | 13 | 6 |
| | Poor | 12 | 5 |
| | Very Poor | 11 | 4 |
| | * | 10 | 3 |
| | ≠ | 9 | 2 |
| | ◊ | 8 | 1 |
| | ± | 7 and below | 0 |

## SELF-ASSESSMENT SCORING TABLE: FLOOR TOUCH TEST

| FLOOR TOUCH TEST | | | |
|---|---|---|---|
| **Rating** | **Rating Description** | **Time Period Position Held** | **Points** |
| Superior | Open palms on the floor | 10 seconds | 10 |
| Excellent | Open palms on the floor | 5-9 seconds | 9 |
| Good | Open palms on the floor | 1-4 seconds | 8 |
| Fair | Fingertips reach the floor | 10 seconds | 7 |
| Minimum | Fingertips reach the floor | 5-9 seconds | 6 |
| Poor | Fingertips touch toes | 1- 10 seconds | 5 |
| Very Poor | Hands/fingertips able to reach the toe box area | 1- 10 seconds | 4 |
| * | Hands/fingertips reach the top of the foot (shoe lace area) | 1- 10 seconds | 3 |
| ≠ | Hands/fingerstips reach the lower tibia area (top of the ankle) | 1- 10 seconds | 2 |
| ◊ | Hands/fingertips reach the upper tibia area | 1- 10 seconds | 1 |
| ± | Hands/fingertips reach your knee area | 1- 10 seconds | 0 |

## SELF-ASSESSMENT SCORING TABLE: FOREARM PLANK FOR TIME

| FOREARM PLANK FOR TIME | | |
|---|---|---|
| **Rating** | **Time** | **Points** |
| Superior | 4:00 and above | 10 |
| Excellent | 3:39-3:59 | 9 |
| Good | 3:18-3:38 | 8 |
| Fair | 2:57-3:17 | 7 |
| Minimum | 2:36-2:56 | 6 |
| Poor | 2:20-2:35 | 5 |
| Very Poor | 1:59-2:19 | 4 |
| * | 1:38-1:58 | 3 |
| ≠ | 1:17-1:37 | 2 |
| ◊ | 1:00-1:16 | 1 |
| ± | :59 and under | 0 |

## SELF-ASSESSMENT SCORING TABLE: 3 MILE RUN FOR TIME

| Male 3 Mile Run | | | | Female 3 Mile Run | | | |
|---|---|---|---|---|---|---|---|
| 20 -29 YRS | Rating | Time | Points | 20 -29 YRS | Rating | Time | Points |
| | Superior | <20:15 | 10 | | Superior | <25:15 | 10 |
| | Excellent | 20:16-22:30 | 9 | | Excellent | 25:16-27:30 | 9 |
| | Good | 22:31-24:00 | 8 | | Good | 27:31-29:00 | 8 |
| | Fair | 24:01-25:00 | 7 | | Fair | 29:01-30:10 | 7 |
| | Minimum | 25:01-25:30 | 6 | | Minimum | 30:11-30:30 | 6 |
| | Poor | 25:31-26:00 | 5 | | Poor | 30:31-31:00 | 5 |
| | Very Poor | 26:01-27:10 | 4 | | Very Poor | 31:01-32:10 | 4 |
| | * | 27:11-28:00 | 3 | | * | 32:11-33:00 | 3 |
| | ≠ | 28:01-29:00 | 2 | | ≠ | 33:01-34:00 | 2 |
| | ◊ | 29:01-30:00 | 1 | | ◊ | 34:01-35:00 | 1 |
| | ± | >30:01 | 0 | | ± | >35:01 | 0 |
| 30 -39 YRS | Rating | Time | Points | 30 -39 YRS | Rating | Time | Points |
| | Superior | <21:00 | 10 | | Superior | <26:00 | 10 |
| | Excellent | 21:01-24:15 | 9 | | Excellent | 26:01-29:15 | 9 |
| | Good | 24:16-25:46 | 8 | | Good | 29:16-30:45 | 8 |
| | Fair | 25:47-27:00 | 7 | | Fair | 30:46-32:00 | 7 |
| | Minimum | 27:01-27:15 | 6 | | Minimum | 32:01-32:15 | 6 |
| | Poor | 27:16-28:02 | 5 | | Poor | 32:16-33:02 | 5 |
| | Very Poor | 28:03-29:00 | 4 | | Very Poor | 33:03-34:00 | 4 |
| | * | 29:01-30:00 | 3 | | * | 34:01-35:00 | 3 |
| | ≠ | 30:01-31:00 | 2 | | ≠ | 35:01-36:00 | 2 |
| | ◊ | 31:01-32:00 | 1 | | ◊ | 36:01-37:00 | 1 |
| | ± | >32:01 | 0 | | ± | >37:01 | 0 |
| 40 -49 YRS | Rating | Time | Points | 40 -49 YRS | Rating | Time | Points |
| | Superior | <22:30 | 10 | | Superior | <27:30 | 10 |
| | Excellent | 22:31-25:45 | 9 | | Excellent | 27:31-30:45 | 9 |
| | Good | 25:46-27:15 | 8 | | Good | 30:46-32:15 | 8 |
| | Fair | 27:16-28:32 | 7 | | Fair | 32:16-33:32 | 7 |
| | Minimum | 28:33-28:50 | 6 | | Minimum | 33:33-33:50 | 6 |
| | Poor | 28:51-29:33 | 5 | | Poor | 33:51-34:33 | 5 |
| | Very Poor | 29:34-30:33 | 4 | | Very Poor | 34:34-35:33 | 4 |
| | * | 30:34-31:33 | 3 | | * | 35:34-36:33 | 3 |
| | ≠ | 31:34-32:33 | 2 | | ≠ | 36:34-37:33 | 2 |
| | ◊ | 32:34-33:33 | 1 | | ◊ | 37:34-38:33 | 1 |
| | ± | >33:34 | 0 | | ± | >38:34 | 0 |
| 50 -59 YRS | Rating | Time | Points | 50 -59 YRS | Rating | Time | Points |
| | Superior | <32:59 | 10 | | Superior | <38:59 | 10 |
| | Excellent | 33:00-33:59 | 9 | | Excellent | 39:00-39:59 | 9 |
| | Good | 34:00-34:59 | 8 | | Good | 40:00-40:59 | 8 |
| | Fair | 35:00-35:59 | 7 | | Fair | 41:00-41:59 | 7 |
| | Minimum | 36:00-36:59 | 6 | | Minimum | 42:00-42:59 | 6 |
| | Poor | 37:00-37:59 | 5 | | Poor | 43:00-43:59 | 5 |
| | Very Poor | 38:00-38:59 | 4 | | Very Poor | 44:00-44:59 | 4 |
| | * | 39:00-39:59 | 3 | | * | 45:00-45:59 | 3 |
| | ≠ | 40:00-40:59 | 2 | | ≠ | 46:00-46:59 | 2 |
| | ◊ | 41:00-41:59 | 1 | | ◊ | 47:00-47:59 | 1 |
| | ± | >42:00 | 0 | | ± | >48:00 | 0 |

**ASSESSMENT SCORESHEET:**

Record your points in all the component categories to calculate your total points. Upon scoring your total number will be within a particular Program Phase Category.

| **Self-Assessment Fitness Measured (DATE HERE)** | |
|---|---|
| **Total Possible score: 40 Points** | |
| **Component** | **Point Totals** |
| Maximum effort push-ups | |
| Floor Touch Test | |
| Plank for time | |
| 3 mile run (GPS tracking used: Y/N) | |
| **Assessment Score:** | |
| Program Phase Categories: | |
| 30-40 | Phase 3 |
| 20-29 | Phase 2 |
| 0-19 | Phase 1 |
| | |

# Program Guide Overview

**FITT Principle review:** F x I x T x T= Y Likelihood of injury rises if you are increasing all elements above simultaneously or in conjunction with one another without optimal recovery. Review the FITT principle section for more detailed information.

***Use the appropriate Phase Program Worksheet for each workout to record your progress.***

**The below outline contains all elements for each workout:**

Breathing Techniques:

A. Prior to starting your mobility movement select *one* (1) breathing technique prior to starting mobility exercises. Options include recovery, tactical, or heart focused breathing.
B. Upon completion of the workout complete a *different* breathing technique.
C. This will ensure you are familiarized with the breathing techniques and which one assists in driving your heart rate down the fastest.

Mobility Movement:

a. Select 4 movements to perform for one (1) minute prior to beginning the workout.
    i. Choose movements that will allow for greater range of motion during the activities you have chosen to complete in your calisthenics training program.
b. Alternate these movements to make certain you are familiar with all mobility movements.

Cardiovascular/Endurance:

a. Throughout your program alternating when you complete cardiovascular is critical. For instance, completing cardiovascular PRIOR to the calisthenics as well as AFTER the calisthenics workout is recommended.
    i. This will help prepare your body in adapting to overall exercise and assist in your knowing how your body responds to movement in different capacities.
    ii. The frequency, intensity, time are provided within the associated program worksheets. Other types of activity are also included.
b. Intensity: Know your max heart rate and vary your intensity.

Calisthenics Training Program:

a. Select your calisthenic movements based on your current program phase category.
b. Do not move into any other program phase category until such time you score within the range of the program phase category after taking another self-assessment test.

Compensation Movement:

A. Perform each compensation movement for one (1) minute.
    a. Select from the compensation movements within the program that will assist in your recovery. Focus on your breathing throughout the movement.
B. Alternate these movements to make certain you are familiar with all compensation movements prior to your arrival to the National Training Academy.

Recovery:

Use the provided guides including mobility movements, foam rolling, tennis ball, and compensation movements throughout your fitness routine. If you have additional stretches that are part of your recovery routine, it is recommended you incorporate the mobility and compensation from this program for familiarization. Adjust your recovery routine when targeted areas are sore such as increasing stretching, mobility movements, and rest to optimize your recovery.

## Phase 1 Program Worksheet

**Date/Name:**

**Directions:**
Record your workout by completing the sections contained within this worksheet.

| **Breathing Technique:** (select one) | **Mobility Movement:** (write in) | **Calisthenics Scoresheet:** (write in the scoresheet used, i.e., EMOM) | **Cardio/Endurance:** (write in) | **Breathing Technique:** (select one) | **Compensation Movement:** (write in) |
|---|---|---|---|---|---|
| ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | | | Type:<br>Time:<br>◯ Prior ◯ After Calisthenics<br>Intensity:<br>◯ High ◯ Medium ◯ Low<br>Average Heart Rate: | ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | |

| **Calisthenic Movements** | **Cardiovascular/Endurance** |
|---|---|
| Front plank for time<br>Butterfly sit-ups<br>Step-out Burpee<br>Split Squat Lunge<br>Bicycle crunch<br>Jack Step-Out (no jump)<br>Plank Jack<br>Spider mountain climber<br>Walk out into cobra pose<br>Ledge sits<br>Squat into frog jump position, stand up, take one step forward with your left. Repeat on the right side. *NO JUMP<br>Lateral squat | **Frequency:** 3x per week<br><br>**Run at least 1x per week.** Remaining days choose from other types of activity list.<br><br>**Intensity:** HIGH at least 1x per week<br><br>**Time:** Begin with 20 minutes and then steadily increase time overall<br><br>**Other types of activity:**<br>Running (outdoor including trails, treadmill)<br>Rowing (indoor or crew)<br>Biking (Peloton/outdoor, mountain/road)<br>Boxing<br>Jump Rope (speed or heavy rope)<br>Battle Ropes<br>Versa climber<br>Jacobs Ladder |

**Recovery:** Select recovery movements to include more compensation movements or from other guides for additional recovery purposes.

CLEAR

## Phase 2 Program Worksheet

**Date/Name:**

**Directions:**
Record your workout by completing the sections contained within this worksheet.

| **Breathing Technique:** (select one) | **Mobility Movement:** (write in) | **Calisthenics Scoresheet:** (write in the scoresheet used, i.e., EMOM) | **Cardio/Endurance:** (write in) | **Breathing Technique:** (select one) | **Compensation Movement:** (write in) |
|---|---|---|---|---|---|
| ◯Recovery<br>◯Tactical<br>◯Heart Focused | | | Type:<br>Time:<br>◯Prior ◯After Calisthenics<br>Intensity:<br>◯High ◯Medium ◯Low<br>Average Heart Rate: | ◯Recovery<br>◯Tactical<br>◯Heart Focused | |

| **Calisthenic Movements** | **Cardiovascular/Endurance** |
|---|---|
| USMS FIT Standard push-up<br>USMS Fit standard sit-up<br>Burpee<br>Front lunge<br>6 inches AND Flutter Kicks<br>4 count jumping jack<br>8 count body builders<br>Mountain Climber aka Running Planks<br>Squat Thrust<br>Air squat, 5 second total movement<br>Frog jumps<br>Skater jumps | **Frequency:** 5x per week<br><br>**Run at least 2-3x per week.** Remaining training days choose from other types of activity list.<br><br>**Intensity:** Different variations throughout the 5 days<br><br>**Time:** will vary per workout<br><br>**Other types of activity:**<br>Running (treadmill, outside, trail)<br>Rowing (indoor or crew)<br>Biking (Peloton/outdoor, mountain/road)<br>Boxing<br>Jump Rope (speed or heavy rope)<br>Battle Ropes<br>Versa climber<br>Jacobs Ladder |

**Recovery:** Select recovery movements to include more compensation movements or from other guides for additional recovery purposes.

CLEAR

## Phase 3 Program Worksheet

**Date/Name:**

**Directions:**
Record your workout by completing the sections contained within this worksheet.

| Breathing Technique: (select one) | Mobility Movement: (write in) | Calisthenics Scoresheet: (write in the scoresheet used, i.e., EMOM) | Cardio/Endurance: (write in) | Breathing Technique: (select one) | Compensation Movement: (write in) |
|---|---|---|---|---|---|
| ◯Recovery<br>◯Tactical<br>◯Heart Focused | | | Type:<br>Time:<br>◯Prior ◯After Calisthenics<br>Intensity:<br>◯High ◯Medium ◯Low<br>Average Heart Rate: | ◯Recovery<br>◯Tactical<br>◯Heart Focused | |

| Calisthenic Movements | Cardiovascular/Endurance |
|---|---|
| Spiderman push-up<br>V-ups<br>Tuck Jump Burpee<br>Walking Lunges<br>Hollow flutter kicks<br>Plyo Jack<br>10 count body builders<br>Plyo Spider<br>Squat thrust into sit thru leg<br>Air squats, 3 seconds total movement<br>Squat thrust into frog jumps<br>Skater jumps, into air squat | **Frequency:** 6x per week INCLUDING one day of Active Recovery. Examples of active recovery include brisk walking, hiking, and low impact activities.<br><br>**Run at least 3x per week.** Remaining days choose from other types of activity list.<br><br>**Intensity:** Alter throughout the week to ensure progress continues.<br><br>**Time:** Will vary per workout but overall work capacity should vary between 40-90 minutes.<br><br>**Other types of activity:**<br>Running (treadmill, outside, trail)<br>Rowing (indoor or crew)<br>Biking (Peloton/outdoor, mountain/road)<br>Boxing<br>Jump Rope (speed or heavy rope)<br>Battle Ropes<br>Versa climber<br>Jacobs Ladder |

**Recovery:** Select recovery movements to include more compensation movements or from other guides for additional recovery purposes.

CLEAR

Calisthenics Scoresheet

# EMOM

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Round 1 | | Round 6 | | Round 11 | | Round 16 | |
|---|---|---|---|---|---|---|---|---|
| | Round 2 | | Round 7 | | Round 12 | | Round 17 | |
| | Round 3 | | Round 8 | | Round 13 | | Round 18 | |
| | Round 4 | | Round 9 | | Round 14 | | Round 19 | |
| | Round 5 | | Round 10 | | Round 15 | | Round 20 | |

| Score: Total Rounds you completed all repetitions in under 60 seconds | Final Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select exercises and build your workout plan prior to starting. Select and record the mobility movements and compensation movements prior to staring the workout.

**EMOM Explained:** Every Minute on the Minute. Perform one circuit (all the repetitions of all the exercise) in less than one minute. Reminder: You are expected to maintain proper form throughout the workout.

## Description of workout:

After performing one circuit give yourself one point in the "ROUND" box of the minute you successfully completed (1-20). If you don't complete them in less than one minute, start over at the beginning of the following minute; and leave that "ROUND" box blank, as you do not get a point for not completing it.

When you finish with your final round (20), take your heart rate, and write it down under "HEART RATE."

Add your points for all the rounds you completed with very good technique (maximum 20).

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

Calisthenics Scoresheet

# AMRAP

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Round 1 | | Round 6 | | Round 11 | | Round 16 | |
|---|---|---|---|---|---|---|---|---|
| | Round 2 | | Round 7 | | Round 12 | | Round 17 | |
| | Round 3 | | Round 8 | | Round 13 | | Round 18 | |
| | Round 4 | | Round 9 | | Round 14 | | Round 19 | |
| | Round 5 | | Round 10 | | Round 15 | | Round 20 | |

| Total Time elapsed for completing all repetitions in Under 20 minutes | Final Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select exercises and build your workout plan prior to starting. Select and record the mobility movements and compensation movements prior to staring the workout.

### AMRAP Explained:

As Many Rounds or Reps As Possible. Reminder: You are expected to maintain proper form throughout the workout.

### Description of Workout:

Record your resting heart rate prior to starting. Perform the exercises in circuit-style completing all the repetitions of all the exercises for one "ROUND" point. Complete as many rounds as possible in twenty minutes. When you finish twenty minutes, take your heart rate, and write it down under "HEART RATE."

Add your points for all the rounds you completed with very good technique. Only 20 possible round points are listed on this sheet, but as it takes a minimum of approximately 90 seconds to complete a round with good form.

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

Calisthenics Scoresheet

# AFAP/T

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Number of Repetitions to Perform |
|---|---|
| | |
| | |
| | |
| | |

| Total Time elapsed for completing all repetitions in Under 20 minutes | Final Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select exercises and build your workout plan prior to starting. Designate a number of repetitions to perform that is consistent for your workout prior to starting. Select and record the mobility movements and compensation movements prior to staring the workout.

## AFAP/T explained:

As Fast As Possible, for a certain amount of time. Reminder: You are expected to maintain proper form throughout the workout.

## Description of workout:

Record your resting heart rate prior to starting. Perform the number of repetitions for each exercise as fast as possible with very good technique, but no longer than twenty minutes.

When you finish all the repetitions, check the clock, then take your heart rate, and write down your time elapsed, your final heart rate.

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

Calisthenics Scoresheet

# 20 / 10 X 8 + 60

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Sets Scored | | | | | | | | Heart Rate |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Score: Add the lowest of the 8 sets from each of the exercises | Average Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select and record the mobility movements and compensation movements prior to staring the workout.

## 20/10 X 8 + 60 Explained:

Perform 8 sets in a row of an exercise: 20 seconds of exercise with 10 seconds of quick recovery. After each set you have 60 seconds to drive your heart rate down and record your heart rate.
Reminder: You are expected to maintain proper form throughout the workout.

## Description of Workout:

Record your resting heart rate prior to starting. Write down your score for each set in the "SETS SCORED" section above. During the 1-minute recovery in between each exercise, take your heart rate, and write it down under "HEART RATE." When you finish with your final exercise quickly record your heart rate and repetitions then take 60 seconds to drive your heart rate down. Record your recovery heart rate.

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

# Common Overuse Injuries

**Reminder:** The likelihood of overuse injuries occurs when persons do not adhere properly to the FITT principles previously described.

If you feel pain in any area that resembles these and/or another injury you are to immediately stop if during movement pain occurs. You are to seek healthcare to further diagnosis the symptom(s) felt for your safety and wellbeing if a potential injury has occurred.

The following common overuse injuries have been identified by National Training Academy Instructors that have observed injuries during training and have been able to connect this to persons not adhering to proper use of the FITT principle concepts. This list does not include all potential injuries, rather are the most frequent that historically and currently happen. They include shin splints, plantar fasciitis, stress fractures in the feet, and shoulder wear and tear related discomfort/injuries.

## SHIN SPLINTS:

**Description:** Shin splints refer to pain and tenderness along or just behind the large bone in the lower leg (the tibia).

**Causes:** Often caused by sudden increases in the intensity or duration of running and impact activities. The repetitive action can lead to inflammation of the muscles, tendons and thin layer of tissue covering the shin bones, causing pain. Improper running technique, bio-mechanical issues and repetitive training methods are identified causes of shin splints. *It is recommended you are aware of your running technique and understand whether you are an overpronator, neutral or supinator.*

**Symptoms:** Likely your calves are tight.

Anterior Shin Splints:

Pain felt on the front and outside of the shin. It's first felt when the heel touches the ground during running. Over time, pain becomes constant, and the shin is painful to the touch. This is referred to as an anterior shin splint, due to affecting the tibialis anterior. Symptoms typically occur on the front edge of the tibia.

**Runners with low arches who overpronate are more likely to have anterior shin splints. Running downhill adds more stress to the tibialis anterior muscle as it works in an eccentric way and must produce a greater contraction. See Image #1 for reference.

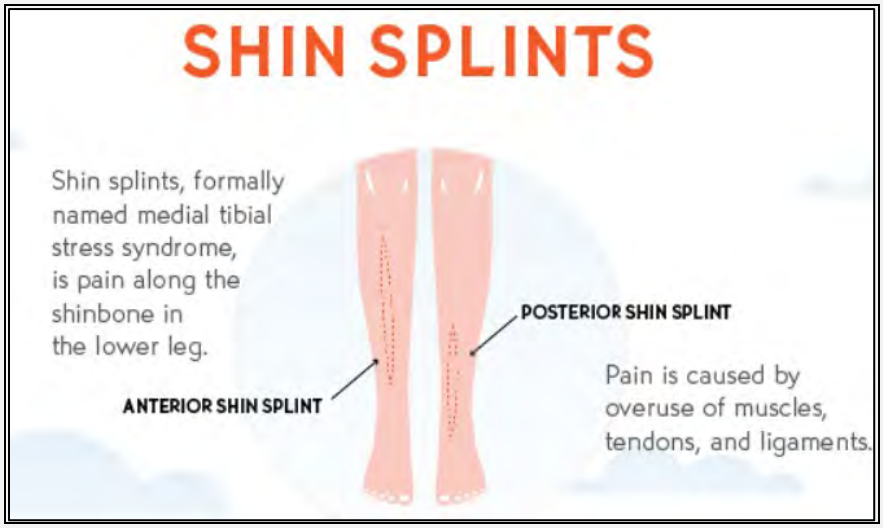
Posterior Shin Splints:

Pain that starts on the inside of the lower leg above the ankle. Pain gets worse when standing on the toes or rolling the ankle inward. As the shin splint progresses, the pain will increase. The pain is directed in the medial ankle area, located behind the medial malleolus and along the lower part of the inner shin. Swelling can be noticed in severe cases. Pain is felt to the touch (sometimes very easily).

**Runners who have high arches and supinate are more likely to develop posterior shin splints. The other reasons for posterior shin splints include overtraining, the wrong type of shoes, hard running surfaces and weaknesses in muscle strength and flexibility. See below image.

***This condition can worsen rapidly if not treated properly.***

***Image #1 Displays Anterior and Posterior Shin Splints:***




Understand foot pronation by using this guide: http://www.shinsplintsclinic.com/foot-pronation-guide/

**Diagnosis:** Healthcare provider can most often diagnose by reviewing your medical history and doing a physical exam. X-rays are often needed.

**Treatment:**

May include stretching exercises, strengthening exercises, cold packs, and running shoes with a stiff heel and special arch support (depending on your running technique). See below Images #2 and #3 for rehabilitation exercise examples.

***Image #2 Displays shin splint rehabilitation exercises:***

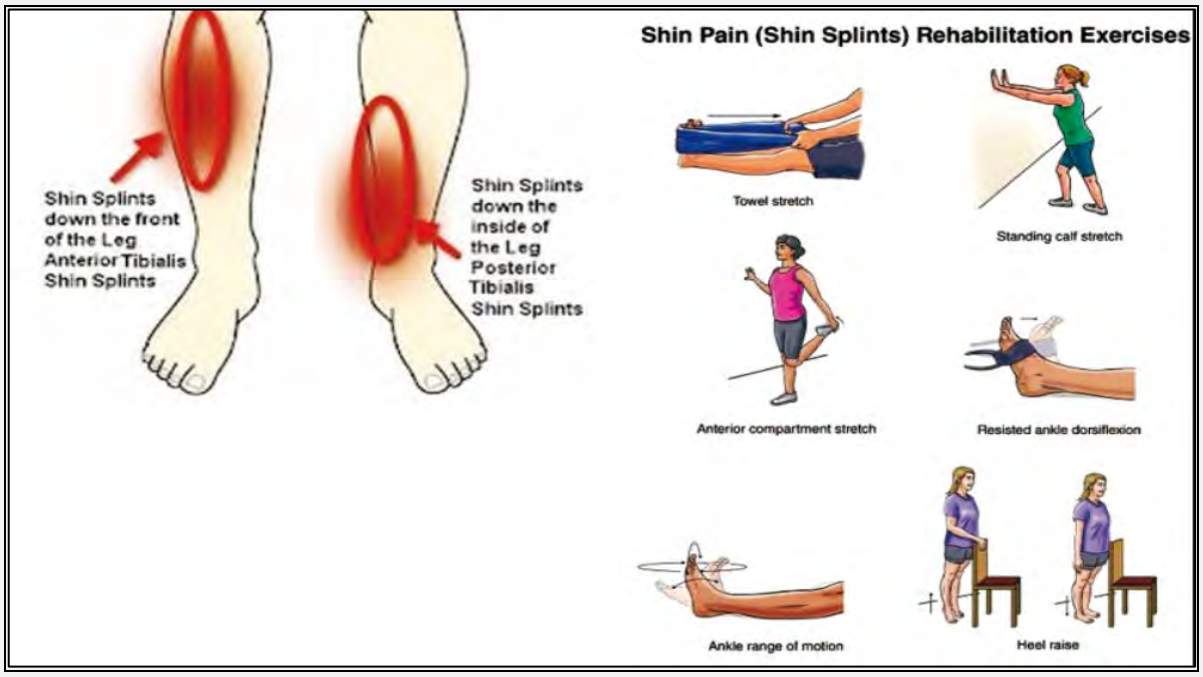
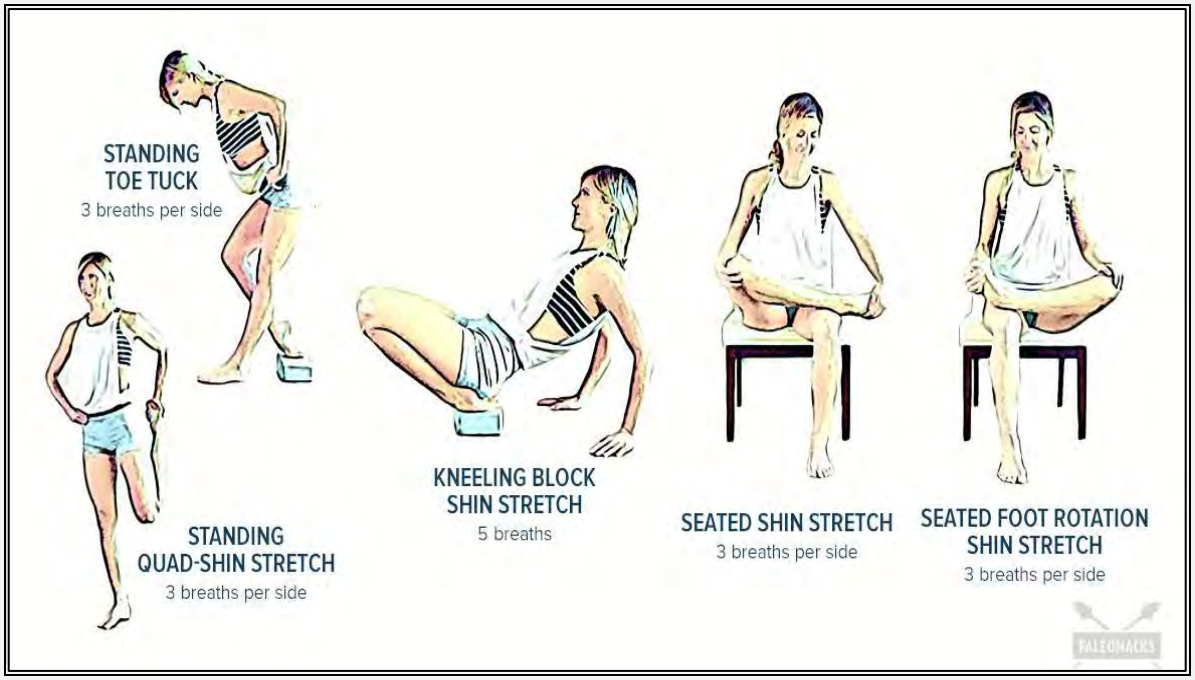


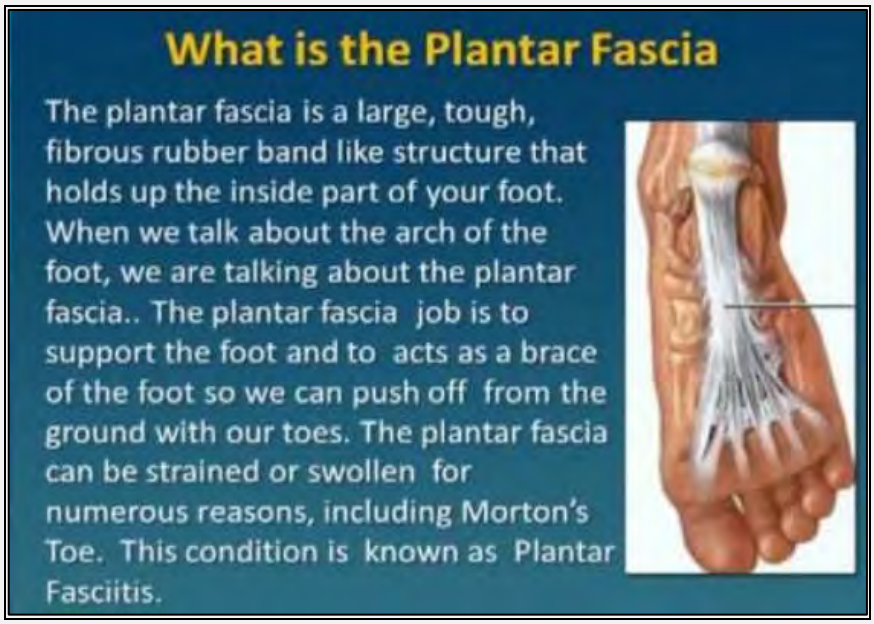

***Image #3 Displays additional shin splint rehabilitation exercises:***



## PLANTAR FASCIITIS:

**Description:** Plantar fasciitis is one of the most common conditions causing heel pain. It involves inflammation of the plantar fascia-a tough, fibrous band of tissue that runs along the sole of the foot. The plantar fascia attaches to the heel bone and to the base of the toes. It assists in supporting the arch of the foot and has an important role in normal foot mechanics during walking. See Image #4 for reference.

***Image #4 Provides an overview of Plantar Fascia:***




**Causes:** An ***increase in activity level (i.e., running program***), the structure or shape of the foot, surface on which you are running, ***type of shoes you are wearing***, and the weight you carry. An example is a heel striker wearing minimalist shoes while running is likely to increase chances of having plantar fasciitis.

**Symptoms:** The pain usually increases gradually and is typically felt near the heel area. Sometimes the pain can be sudden, occurring after missing a step or jumping. The pain tends to be the worst when you get up in the morning OR after other periods of inactivity (i.e., sitting for a period of time). The degree of discomfort can sometimes lessen with activity during the day or warming up properly. The pain may also appear more intense in bare feet OR in ***shoes with minimal support.***

***Image #5 Displays the inflammation area and the surrounding tendons/bones:***

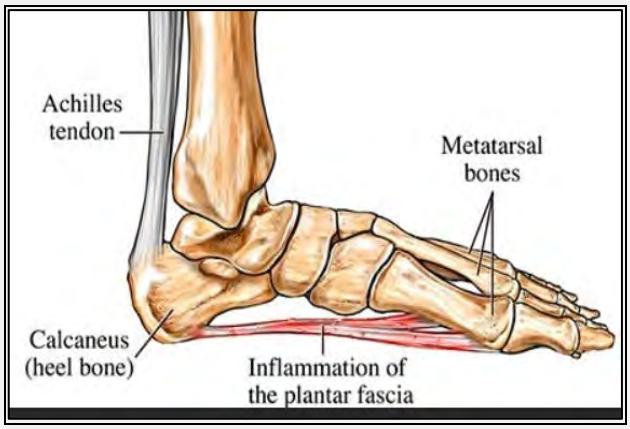



***Image #6 Provides a summary of symptoms:***

**Diagnosis:** Plantar fasciitis can be one of many conditions causing heel pain, and some others include: nerve compression in the foot or in the back, stress fractures of the calcaneus, and loss of the fatty tissue pad under the heel. Plantar fasciitis can be diagnosed from these and other conditions based on medical history and examination by a physician.

**Treatment:**

May include stretching focused on the plantar fascia and the Achilles tendon area, physical therapy, icing, activity modification. Doctors may recommend ***switching to shoes with arch support,*** applying athletic tape to your foot to support muscles and ligaments, wearing night splints to continue stretching your foot while you sleep, ***decrease distance/duration of running***.

***Image #7 Stretches that are highly recommended:***

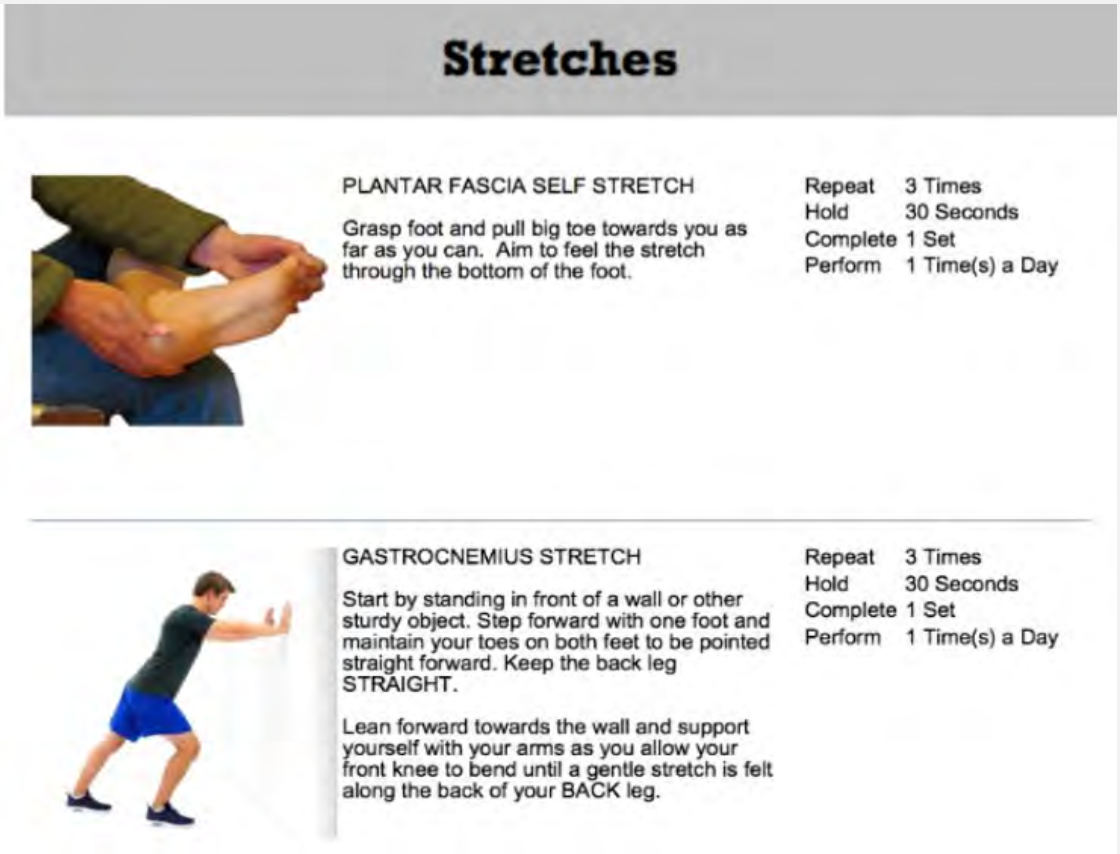


***Image #8 Additional plantar fasciitis stretches:***

## Plantar Fasciitis Stretches

Six top stretches to help relieve heel pain

1. **Soleus Stretch:** With both knees apart and your toes facing forward, lean into the wall until you feel the stretch in your lower calf. Hold for 30 seconds and repeat 3 times.

2. **Step Stretch:** Stand with your toes on a step and your heels off the edge. Slowly lower your heels down, hold for 15 seconds, and then lift your heels to their starting position. You can either do both feet at the same time, or one foot at a time. Repeat five times.

3. **Roll Stretch:** Using a Mini Thera-Roll, roll it back and forth from your toes to your heels. This is great for a long day on your feet or to help relieve stiffness or swelling.

4. **Plantar Fascia Massage:** Using two fingers, apply small circular friction to any tight knots or lumps in the plantar fascia. The pressure should be deep, but not so much that you tighten up with pain.

5. **Elastic Strap Stretch:** Sit on the floor with your legs straight in front of you. Take a stretch strap and place it around your toes. Gently pull the strap towards you. Hold for 15 to 30 seconds, then release. Repeat 3 times.

6. **Toe Stretch:** Place just toes up on the wall with the ball of the foot and heel on the ground. Lean into the wall slowly until the stretch is felt. Hold for 30 seconds and repeat 3 times.

***Image #9 Ice Massage described for plantar fasciitis:***

## STRESS FRACTURES IN THE FEET:

**Description:** A stress fracture is a very small, fine break in the bone caused by continuous overuse. They often occur in the foot after training for running, basketball and other sports. While stress fractures can occur many bones that are subjected to repetitive activities, the bones of the legs and feet are at greatest risk. ***The bones in the midfoot (metatarsals) in runners are especially vulnerable to stress fractures.***

**Causes:** Stress fractures often result from ***increasing the amount or intensity of an activity too quickly***. Increasing your running mileage too quickly will increase the likelihood of this overuse injury.

**Symptoms:** A stress fracture may not cause obvious swelling. Tenderness in a specific spot that decreases with rest is common. Symptoms can occur differently in each person but may include:

Pain in the front of the foot, often after long or intense bouts of exercise.

Pain that goes away after exercise, then returns when exercise is continued.

***If you notice pain in your foot, stop whatever you were doing when the symptoms started and seek a doctor for an exam.***

**Diagnosis:** The symptoms of stress fractures can be like OTHER health conditions. Always see your doctor for a diagnosis. It is usually confirmed with a complete health history and a physical exam. X-rays often cannot see stress fractures because they are so fine, so an MRI or bone scan may be done.

**Treatment:** Treatment depends on the severity of the fracture. Treatment is aimed at relieving pain and giving the fracture time to heal, usually around 6 to 8 weeks. Specific treatment for a stress fracture will depend on your age, overall health, health history, how serious your injury is, how long your injury is expected to last. Also, treatment may include rest, protection of the fracture site with reduced weight-bearing, cold packs, medicine, running on soft surfaces, physical therapy, wearing a brace and other treatments.

***Image #10 Displays common areas of stress fractures within the foot area:***

## SHOULDER WEAR AND TEAR RELATED DISCOMFORT/INJURIES:

**Description:** Prior injuries such as dislocation can accelerate the loss of cartilage in the joint, leading to arthritis at a younger age. Also, placing a higher demand on your shoulder with repetitive overhead activities can lead to more advanced rotator cuff disease earlier in life. These conditions are referred to as 'wear and tear' because of the slow and progressive nature of the degeneration, much like wearing a hole through your sock. Wear and tear most frequently refers to thinning or loss of the cartilage linking of the joint (arthritis) or tears of the rotator cuff tendon.

Because the ball of the upper arm is larger than the socket of the shoulder, it is susceptible to injury. The shoulder joint must also be supported by soft tissues muscles, tendons, and ligaments which are also subject to injury, overuse, and/or under use.

Some common shoulder problems include the following: dislocation, separation, bursitis, impingement syndrome, tendinosis, rotator cuff tear, adhesive capsulitis (frozen shoulder), and fracture.

**Causes:** Injury and degeneration are the two. This type of injury may happen suddenly such as when falling on an outstretched hand, but it may also develop over time due to repetitive activities. Rotator cuff tears may also happen due to aging, with degeneration of the tissues.

**Symptoms:** Shoulder pain maybe localized in a specific area OR may spread to areas around the shoulder OR down the arm.

Arthritis presents gradually increasing pain and loss of motion, ultimately making it difficult to basic movements such as getting dressed. Shoulder arthritis may develop sooner in those who play certain sports.

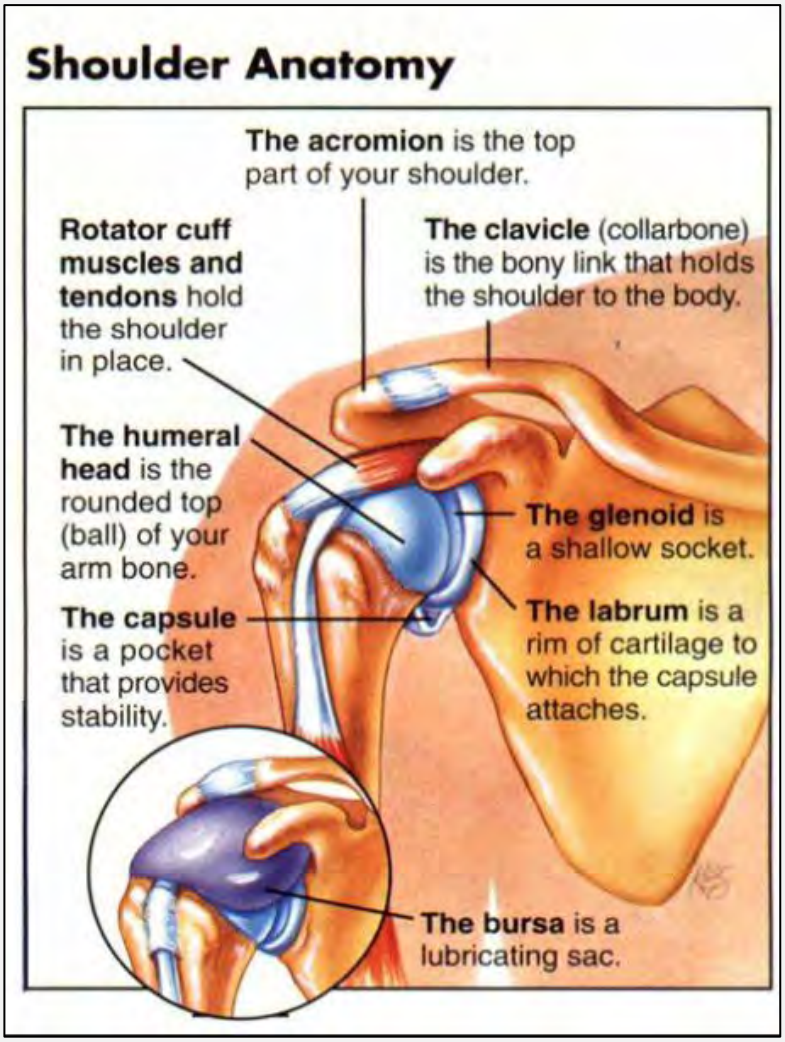
Rotator cuff tears also present with pain, but can also be associated with weakness, making it difficult to reach overhead or lift things away from the body. Common symptoms may include recurrent pain, especially with certain activities, pain that prevents you from sleeping on your injured side, grating, or cracking sounds when moving your arm, limited ability to move your arm, muscle weakness.

***If you are having ongoing pain or losing function in your shoulder, see a Doctor specialized in the area and restrict all workouts that affect this area until seen.***

**Diagnosis:** In addition to a complete medical history and physical exam, an x-ray, computed tomography scan (CT or CAT scan) and/or Magnetic resonance Imaging (MRI) may also be needed. The symptoms of a rotator cuff tear may resemble other conditions or medical problems. Always meet with your healthcare provider for a diagnosis.

**Treatment:** May include rest, activity modification, ultrasound therapy, strengthening and stretching exercises such as range-of-motion exercises, nonsteroidal anti-inflammatory medicines, surgery (for severe injuries) and other remedies or combination thereof.

***Image #11 Displays shoulder anatomy:***



If you have discomfort that limits your range of motion or pain, schedule an appointment with your healthcare provider and seize any movement that causes additional discomfort/pain associated with the area.

***Image #12 Displays range of motion for the shoulder:***

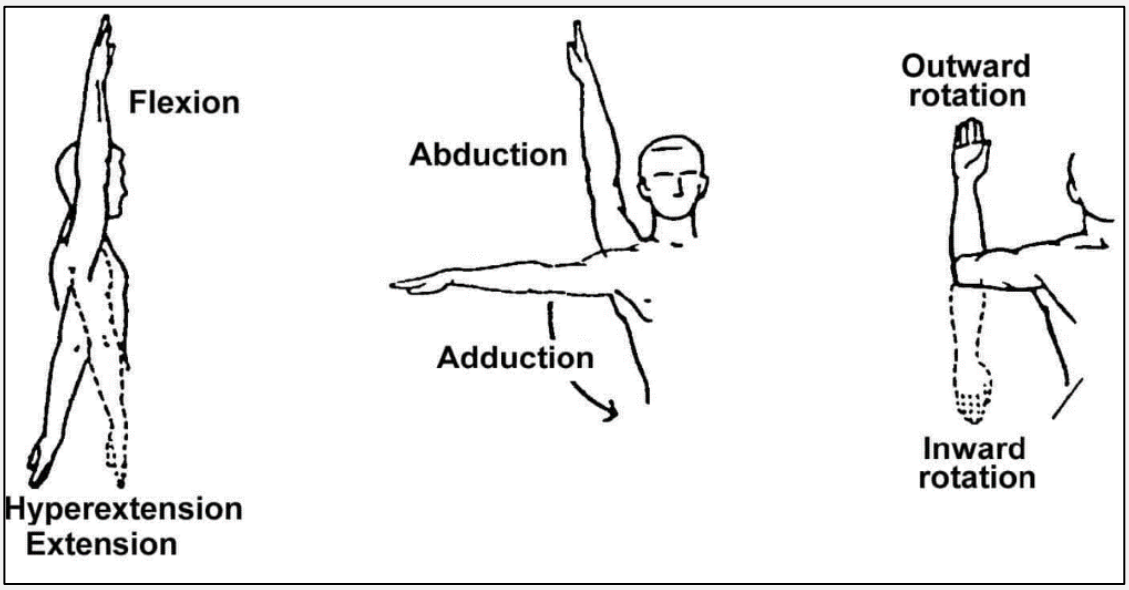
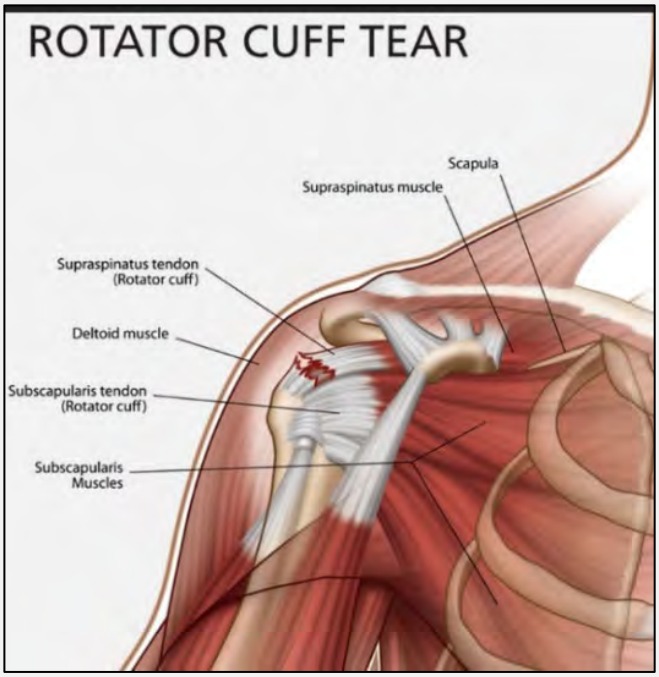



***Image #13 Displays a rotator cuff tear injury:***




***Resource: Johns Hopkins Sports and Injuries for written synopsis provided***

Return to TOC

# USMS FIT Standards

The **United States Marshals Service Fitness** test information for the Physical Fitness Battery Test, including the exercises and standards are described and accessible via this link: **The USMS FIT Program.**

Located within FIT Program Info section is a description of all four (4) elements describing what the exercise measures, procedures, and standards. If personnel have any questions about the specific procedure in performing the exercise, they are to contact their USMS FIT Coordinator within their District or immediate area.

# Mobility Movements

In all Program Phase categories, you can select movements contained within the Mobility Manual for your workout program.

In addition to the current compensation movements within the manual please refer to the Mobility Movements section for additional movements including:

Pelvic tilt into bridging

I, Y and T Shoulder movements

Lateral lunge into knee up

Some examples of mobility movements to familiarize yourself with for optimal performance if you have yet to attend the National Training Academy include, but are not limited to the following:

Backstroke

Inside shoulder circle

Shinbox switch

Hip Hurdle

Bridging

Spinal rotation

# Checking your pulse & Recovery Breathing Techniques

It is highly recommended that you understand how to check your pulse without using a heart rate monitor. Review the “How to Check Your Pulse” section by Johns Hopkins Medicine for a detailed explanation.

**Recovery Breathing Explained:**

In between sets and immediately after the workout has ended, your primary goal is to recover. Think of it in terms of a fight. The person who recovers first wins. We use breathing techniques to accomplish this. Under normal conditions breathing is a subconscious, natural function of the body that brings in oxygen and flushes out carbon dioxide. Manipulation of breathing cadences can influence the central nervous system to either excite or calm down. Conversely, slowing the rate of respiration can help a person calm down, think clearly, and function. It is a proven method of keeping the central nervous system in check, so we can operate rather than spin out of control. Recovery breathing comes first so we can gain control. Tactical breathing comes next, so we stay in control. Both are applicable to combat physical and psychological stress on and off duty.

**Recovery:**

1. Stand straight, lift your chest high, hands off hips (so your shoulders can relax without tension), and close your mouth.
2. Inhale through the nose and extend your stomach. Fill your belly up with air with a low sustained inhalation not a greedy gulp.
3. Sharply exhale, driving all the air from your stomach, until your belly button hits your spine.
4. Roll your bottom ribs down as you exhale, driving every bit of air out.
5. Standing straight, fill your belly back up with air and perform two sharp exhales with no inhale between.

*This should take 10-20 seconds. Immediately follow with tactical breathing if at the end of the workout. If your rest period is less than 60 seconds, resume normal breathing. If using a heart rate monitor, make sure to note how many beats you recovered.*

**Tactical Breathing:**

1. Breathe in through the nose, slow and steady, for 4 seconds.
2. Hold your breath for 4 seconds.
3. Exhale through the mouth, slow and steady, for 4 seconds.
4. Hold your breath for 4 seconds.
5. Repeat.

It is very important to remember that during inhalation and exhalation you should not fill up and to expend as fast as possible. Slow and steady!

***Resource for Recovery and Tactical Breathing: Conditioning Program Guide on TD Website***

# Recovery Breathing Techniques:

**Heart Focused Breathing:**

Because breathing patterns modulate the heart's rhythm, it is possible to generate a coherent heart rhythm simply by breathing slowly and regularly at a 10-second rhythm (5 seconds on the in-breath and 5 seconds on the out-breath). Breathing rhythmically in this fashion can thus be a useful intervention to initiate a shift out of stressful emotional state and into increased coherence. However, this type of cognitively directed paced breathing can require considerable mental effort and is difficult for some people to maintain.

***Resource: https://www.heartmath.com/science/***

# Calisthenics Training Program

This program directly correlates with your current assessment score and places you within a particular program phase category. Regardless of phase category placement it is recommended that you read all descriptions provided below so you have a full understanding of the program. *See the Calisthenics Training Program Guide for exercise descriptions and visual content.*

## Phase 1: Regression

Calisthenic movements within this phase are regression movements of Program Phase 2 . These movements will prepare you for Program Phase 2 movements when as you advance through your training program. These movements specifically decrease the demand of the exercise that is within the Program Phase 2 program. This is an approach to build your overall fitness levels in a safe manner.

These particular calisthenic movements can be used if anyone within Phase 2 or Phase 3 needs to lower impact or have a deload period in their training regimen.

Until another self-assessment is completed within the recommended time-frame and you score within the Program Phase 2 category you are to complete all Program Phase 1 calisthenic movements within the calisthenic training program.

Cardiovascular/Endurance is the least amount with reference to the FITT principle to mitigate risk for injury.

## Phase 2: Functional Fitness Standard

Calisthenic movements within this program phase are movements that focus on building and maintaining functional patterns to further support your daily life. For those who have yet to attend the National Training Academy it is highly recommended you are able to complete all Phase 2 movements.

Until another self-assessment is completed within the recommended time-frame and you score within the Program Phase 3 category you are to complete all Program Phase 2 calisthenic movements within the calisthenic training program.

The Cardiovascular/Endurance regimen provides personnel with a performance standard that is appropriate for operational readiness.

**Phase 3: Progression**

These movements should be done without any compensations to mask poor mobility or insufficient strength. When you create your calisthenics scoresheet you can utilize all Program Phase 3 movements however it is incumbent that you incorporate Program Phase 2 movements at least once per week during your regimen. The combination of Phase 3 and Phase 2 movements will assist in mitigating overuse injuries.

For those who have yet to attend the National Training Academy it is highly recommended you are able to complete all Phase 2 movements. Therefore, solely focusing on only Program Phase 3 movements is not advised.

When you create your calisthenics scoresheet you can utilize all Program Phase 3 movements however it is incumbent that you incorporate Program Phase 2 movements at least once per week during your regimen.

The Cardiovascular/Endurance regimen provides personnel with a performance standard that is highest in frequency however includes active recovery. If any area is particularly sore from movements it is recommended to increase active recovery.

The below movements are an overview of the content provided within the Calisthenics Training Program Guide which includes detailed description and visual content.

| **Program Phase 1:** **Regression** | **Program Phase 2:** **Functional Fitness Standard** | **Program Phase 3:** **Progression** |
|---|---|---|
| Front Plank for time | Push-up (USMS FIT standard) | Spiderman pushup |
| Butterfly sit-ups | Sit-up (USMS FIT standard) | V-ups |
| Step-out Burpee | Burpee (includes pushup) | Tuck Jump Burpee |
| Split squat lunge | Front Lunge | Walking lunges |
| Bicycle Crunch | 6 inches AND Flutter Kicks | Hollow body Flutter Kicks |
| Jack Step-Out (no jump) | Jumping Jack (4 count) | Plyo Jack |
| Plank Jack | 8 count body builders | 10 count body builders |
| Step up | Box jump (if possible, on 24-inch box/surface) | Burpee Box Jump |
| Spider Mountain Climber | Mountain Climber | Spider Plyo Mountain Climber |
| Walk-out Cobra | Squat Thrust | Squat thrust into leg thru |
| Ledge sits | Air Squat/Body Weight Squat (5 seconds) | Air Squat/Body Weight Squat (3 seconds) |
| Squat, step forward | Frog Jumps | Squat thrust into frog jumps |
| Lateral Squat | Skater Jumps | Skater jump into air squat |

# Cardiovascular/Endurance Program

Running intervals allows for an increase in intensity and creates a contrast between the work interval and recovery period—this contrast can really awaken muscles that often get a little 'sleepy' from constant steady pace mileage," says David Siik, fitness coach and creator of Precision Run treadmill training at Equinox and Variis instructor.

**Description of interval running:**
Increases endurance and speed. This can be modified in all training programs depending on the person's baseline of running.

**Principals to keep in mind:** F x I x T x T= Likelihood of injury rises if you are increasing all elements simultaneously or in conjunction with one another without optimal recovery.

Frequency (how often, i.e., per week)
Intensity (the degree of effort, your exertion during exercise)
Time (how long you perform the exercise per session, i.e., 30 minutes)
Type (the method of exercise)

***When focusing on your running it is recommended you focus on one of these elements at a time (Frequency/Intensity/Duration) to lower your risk for overall injury and improving performance.**

**Self-Assessment to complete (if Internal Running is new to your fitness routine):**
10-minute jog followed by 2-minute recovery walk
AND then repeating for a total of 3 rounds

Upon completion of this initial assessment record your running times and use this as your baseline interval assessment to track your overall cardiovascular progress. You can incorporate this into your workout program at least once per month.

If you are unable to complete this for any reason upon your first attempt, then you are to regress and complete this for 2 rounds. Do not retake this assessment within 48 hours of your first attempt if unsuccessful. Steadily complete this interval running assessment until you can do this for 30 minutes. Ensure to alter your cardiovascular program per your Phase level.

**Included below are some examples of Interval Workouts once you successfully complete the initial interval assessment.**

**Example of 800s Interval Workout:**
Starting point: based upon your current level so do an assessment for 10 minutes and assess whether your pace is too fast to sustain for longer periods of time.

Duration: work up to 30 minutes of this exercise

0-.50: work up to your pace
Every 800 meters change your pace: Increase then decrease (to your starting pace)
*Try to increase your pace by .50-1.00 if on a treadmill. If outside, try to increase your pace by 30-40 seconds.

**Example of 400s Interval Workout:**

Starting point: Based on your 1.5-mile time you should know your steady pace. For example, if your 1.5-mile time is an 11-minute pace for 1 mile your intervals

Duration: work up to 30 minutes to complete this workout
0-.50: work up to your pace
Every 400 meters change your speed.
For example, on the treadmill increase .5-1.0 if possible, then decrease the next 400 meters.

**Speed Interval Training**

In most cases, you'll want to warm up with about a 3-minute walk/jog. Then slightly increase the speed to a pace that you can sustain for a prolonged period of time. Continue at this pace for 5 minutes, then increase the speed by half a mile per hour (mph) for two minutes before returning to your base speed.

**Tempo Interval Running**
"Tempo" effort is best described as comfortably hard.

Warm up by walking for 3:00
Run for 5:00 at a moderate pace
Run for 5:00 at tempo
Jog for 2:00 at a light pace
Repeat intervals for 4 sets
Cool down by walking for 3:00

**Conversion Assistance: Different physical activities**

| RUN | ROW meters | | BIKE calories | | STAIRS | TIME |
|---|---|---|---|---|---|---|
| meters | M | W | M | W | flights | domain |
| 100 | 125 | 100 | 6 | 4 | 2 | 0:30 |
| 200 | 250 | 200 | 12 | 9 | 4 | 1:00 |
| 300 | 375 | 300 | 18 | 14 | 6 | 1:30 |
| 400 | 500 | 400 | 24 | 18 | 8 | 2:00 |
| 600 | 750 | 600 | 36 | 27 | 12 | 3:00 |
| 800 | 1000 | 800 | 48 | 36 | 16 | 4:00 |
| 1000 | 1250 | 1000 | 60 | 45 | 20 | 5:00 |
| 1600/1M | 2000 | 1600 | 96 | 72 | 32 | 8:00 |

CAL ROW to BIKE or RUN

| ROW | BIKE | RUN |
|---|---|---|
| calorie | calorie | meter |
| 10 | 7 | 100 |
| 15 | 11 | 150 |
| 20 | 14 | 200 |
| 25 | 18 | 250 |
| 30 | 21 | 300 |
| 40 | 29 | 400 |
| 50 | 36 | 500 |

***Resource: https://daybreakcrossfit.com***

**Speed Conversions, Pace Times and Target Distances**

| MPH | km/hr | Min/Mi | Min/Km | 3 mi | 5 km | 8 km | 10 km | 1/2 mar. | Marathon |
|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 4.8 | 0:20:00 | 0:12:26 | 1:00:00 | 1:02:08 | 1:39:25 | 2:04:16 | 4:22:13 | 8:44:26 |
| 3.2 | 5.1 | 0:18:45 | 0:11:39 | 0:56:15 | 0:58:15 | 1:33:12 | 1:56:30 | 4:05:50 | 8:11:40 |
| 3.4 | 5.5 | 0:17:39 | 0:10:58 | 0:52:56 | 0:54:50 | 1:27:43 | 1:49:39 | 3:51:22 | 7:42:44 |
| 3.6 | 5.8 | 0:16:40 | 0:10:21 | 0:50:00 | 0:51:47 | 1:22:51 | 1:43:34 | 3:38:31 | 7:17:02 |
| 3.8 | 6.1 | 0:15:47 | 0:09:49 | 0:47:22 | 0:49:03 | 1:18:29 | 1:38:07 | 3:27:01 | 6:54:02 |
| **4.0** | **6.4** | **0:15:00** | **0:09:19** | **0:45:00** | **0:46:36** | **1:14:34** | **1:33:12** | **3:16:40** | **6:33:20** |
| 4.2 | 6.8 | 0:14:17 | 0:08:53 | 0:42:51 | 0:44:23 | 1:11:01 | 1:28:46 | 3:07:18 | 6:14:36 |
| 4.4 | 7.1 | 0:13:38 | 0:08:28 | 0:40:55 | 0:42:22 | 1:07:47 | 1:24:44 | 2:58:47 | 5:57:34 |
| 4.6 | 7.4 | 0:13:03 | 0:08:06 | 0:39:08 | 0:40:31 | 1:04:50 | 1:21:03 | 2:51:01 | 5:42:01 |
| 4.8 | 7.7 | 0:12:30 | 0:07:46 | 0:37:30 | 0:38:50 | 1:02:08 | 1:17:40 | 2:43:53 | 5:27:46 |
| **5.0** | **8.0** | **0:12:00** | **0:07:27** | **0:36:00** | **0:37:17** | **0:59:39** | **1:14:34** | **2:37:20** | **5:14:40** |
| 5.2 | 8.4 | 0:11:32 | 0:07:10 | 0:34:37 | 0:35:51 | 0:57:21 | 1:11:42 | 2:31:17 | 5:02:34 |
| 5.4 | 8.7 | 0:11:07 | 0:06:54 | 0:33:20 | 0:34:31 | 0:55:14 | 1:09:02 | 2:25:41 | 4:51:21 |
| 5.6 | 9.0 | 0:10:43 | 0:06:39 | 0:32:09 | 0:33:17 | 0:53:16 | 1:06:35 | 2:20:28 | 4:40:57 |
| 5.8 | 9.3 | 0:10:21 | 0:06:26 | 0:31:02 | 0:32:08 | 0:51:25 | 1:04:17 | 2:15:38 | 4:31:16 |
| **6.0** | **9.7** | **0:10:00** | **0:06:13** | **0:30:00** | **0:31:04** | **0:49:43** | **1:02:08** | **2:11:07** | **4:22:13** |
| 6.2 | 10.0 | 0:09:41 | 0:06:01 | 0:29:02 | 0:30:04 | 0:48:06 | 1:00:08 | 2:06:53 | 4:13:46 |
| 6.4 | 10.3 | 0:09:22 | 0:05:50 | 0:28:07 | 0:29:08 | 0:46:36 | 0:58:15 | 2:02:55 | 4:05:50 |
| 6.6 | 10.6 | 0:09:05 | 0:05:39 | 0:27:16 | 0:28:15 | 0:45:11 | 0:56:29 | 1:59:11 | 3:58:23 |
| 6.8 | 10.9 | 0:08:49 | 0:05:29 | 0:26:28 | 0:27:25 | 0:43:52 | 0:54:50 | 1:55:41 | 3:51:22 |
| **7.0** | **11.3** | **0:08:34** | **0:05:20** | **0:25:43** | **0:26:38** | **0:42:36** | **0:53:16** | **1:52:23** | **3:44:46** |
| 7.2 | 11.6 | 0:08:20 | 0:05:11 | 0:25:00 | 0:25:53 | 0:41:25 | 0:51:47 | 1:49:15 | 3:38:31 |
| 7.4 | 11.9 | 0:08:06 | 0:05:02 | 0:24:19 | 0:25:11 | 0:40:18 | 0:50:23 | 1:46:18 | 3:32:37 |
| 7.6 | 12.2 | 0:07:54 | 0:04:54 | 0:23:41 | 0:24:32 | 0:39:15 | 0:49:03 | 1:43:30 | 3:27:01 |
| 7.8 | 12.6 | 0:07:42 | 0:04:47 | 0:23:05 | 0:23:54 | 0:38:14 | 0:47:48 | 1:40:51 | 3:21:42 |
| **8.0** | **12.9** | **0:07:30** | **0:04:40** | **0:22:30** | **0:23:18** | **0:37:17** | **0:46:36** | **1:38:20** | **3:16:40** |
| 8.2 | 13.2 | 0:07:19 | 0:04:33 | 0:21:57 | 0:22:44 | 0:36:22 | 0:45:28 | 1:35:56 | 3:11:52 |
| 8.4 | 13.5 | 0:07:09 | 0:04:26 | 0:21:26 | 0:22:12 | 0:35:30 | 0:44:23 | 1:33:39 | 3:07:18 |
| 8.6 | 13.8 | 0:06:59 | 0:04:20 | 0:20:56 | 0:21:41 | 0:34:41 | 0:43:21 | 1:31:28 | 3:02:57 |
| 8.8 | 14.2 | 0:06:49 | 0:04:14 | 0:20:27 | 0:21:11 | 0:33:54 | 0:42:22 | 1:29:24 | 2:58:47 |
| **9.0** | **14.5** | **0:06:40** | **0:04:09** | **0:20:00** | **0:20:43** | **0:33:08** | **0:41:25** | **1:27:24** | **2:54:49** |
| 9.2 | 14.8 | 0:06:31 | 0:04:03 | 0:19:34 | 0:20:16 | 0:32:25 | 0:40:31 | 1:25:30 | 2:51:01 |
| 9.4 | 15.1 | 0:06:23 | 0:03:58 | 0:19:09 | 0:19:50 | 0:31:44 | 0:39:40 | 1:23:41 | 2:47:22 |
| 9.6 | 15.4 | 0:06:15 | 0:03:53 | 0:18:45 | 0:19:25 | 0:31:04 | 0:38:50 | 1:21:57 | 2:43:53 |
| 9.8 | 15.8 | 0:06:07 | 0:03:48 | 0:18:22 | 0:19:01 | 0:30:26 | 0:38:03 | 1:20:16 | 2:40:33 |
| **10.0** | **16.1** | **0:06:00** | **0:03:44** | **0:18:00** | **0:18:38** | **0:29:50** | **0:37:17** | **1:18:40** | **2:37:20** |
| 10.2 | 16.4 | 0:05:53 | 0:03:39 | 0:17:39 | 0:18:17 | 0:29:14 | 0:36:33 | 1:17:07 | 2:34:15 |
| 10.4 | 16.7 | 0:05:46 | 0:03:35 | 0:17:18 | 0:17:55 | 0:28:41 | 0:35:51 | 1:15:38 | 2:31:17 |
| 10.6 | 17.1 | 0:05:40 | 0:03:31 | 0:16:59 | 0:17:35 | 0:28:08 | 0:35:10 | 1:14:13 | 2:28:26 |
| 10.8 | 17.4 | 0:05:33 | 0:03:27 | 0:16:40 | 0:17:16 | 0:27:37 | 0:34:31 | 1:12:50 | 2:25:41 |
| **11.0** | **17.7** | **0:05:27** | **0:03:23** | **0:16:22** | **0:16:57** | **0:27:07** | **0:33:54** | **1:11:31** | **2:23:02** |
| 11.2 | 18.0 | 0:05:21 | 0:03:20 | 0:16:04 | 0:16:39 | 0:26:38 | 0:33:17 | 1:10:14 | 2:20:28 |
| 11.4 | 18.3 | 0:05:16 | 0:03:16 | 0:15:47 | 0:16:21 | 0:26:10 | 0:32:42 | 1:09:00 | 2:18:01 |
| 11.6 | 18.7 | 0:05:10 | 0:03:13 | 0:15:31 | 0:16:04 | 0:25:43 | 0:32:08 | 1:07:49 | 2:15:38 |
| 11.8 | 19.0 | 0:05:05 | 0:03:10 | 0:15:15 | 0:15:48 | 0:25:17 | 0:31:36 | 1:06:40 | 2:13:20 |
| **12.0** | **19.3** | **0:05:00** | **0:03:06** | **0:15:00** | **0:15:32** | **0:24:51** | **0:31:04** | **1:05:33** | **2:11:07** |

***Resource: SpeedConversionChart***

Return to TOC

# Compensation Movements

In all Program Phase categories, you can select movements contained within the Compensation Manual provided.

In addition to the current compensation movements within the manual please refer to the Compensation Movements section for additional movements including:

Scorpion

Walk outs into superman stretch

Some examples of compensation movements to familiarize yourself with for optimal performance if you have yet to attend the National Training Academy include, but are not limited to the following:

Downward facing dog

Upward facing dog

Pigeon

Standing side bend

Shoulder bridge

Scorpion

# Foam Rolling Guide

**What is foam rolling?**

Read the below article for further explanation on foam rolling, also known as self-myofascial release:

**Johns Hopkins Medicine: Release Muscle Tension, Foam Rolling 101**

**Why is the foam roller used?**
To increase blood flow to a particular area. This then delivers more nutrients to aid the muscle in recovery after the stretch is completed.

**When to use the foam roller as a method of stretching and/or recovery:**
You can use the foam roller prior to working out. If used, it is also recommended to then do some dynamic stretches to prepare your body for your workout. Foam rolling can also be used as a recovery stretch, such as potentially being an effective therapeutic modality to reduce DOMS (delayed onset muscle soreness) while enhancing the recovery of muscular performance.

**For details on movements see the appropriate section within the packet.**

Quadricep

Iliotibial Band (IT Band)

Hamstring

Gluteal Region

Calves

Tibia

Thoracic Spine (T-Spine)

# Tennis Ball Guide

**Why is a tennis ball used to stretch?**

The tennis ball is being recommended due to the hardness verse the lacrosse ball since injured tissues need softer massage balls. These exercises will help you stimulate blood flow. When you dig into your muscles with a tennis ball, you can isolate knots that you might not otherwise target.

**When to use the tennis ball as a method of stretching and/or recovery:**
Just like the foam roller, using a tennis ball for stretching can be done prior to exercise or post exercise. Many use the tennis ball for recovery purposes alone.

**For details on movements see the appropriate section within the packet.**

Shoulders and upper back

Middle and lower back

Gluteal Complex

Tibia

Calves

Feet

Neck

# Wellness Packet

## Exercise Induced Rhabdomyolysis Fact Sheet

What causes Exercise induced Rhabdomyolysis (exRML): **Excessive or intense exercise** beyond the extent of personal or physical limits may induce various types of musculoskeletal damage, including exercise-induced rhabdomyolysis (exRML), a pathophysiological condition of **skeletal muscle cell** damage. Symptoms of exRML are similar to those of delayed onset muscle soreness that can be easily overlooked. During exercise, factors that may cause exRML include the exercise experience of participants, level of physical fitness, the intensity, duration, and types of exercises. Other important factors in exRML are the **intensity and duration of exercises**.

### Contributing factors:

Exertional **heat stroke syndrome** induced fever and encephalopathy (delirium, seizures, and coma) as well as the muscle weakness could lead to exRML.

### Electrolyte imbalance:

Sex: The incidence of exRML in **males** has been reported to be higher compared to females.
Diet: suggesting that exRML may be associated with **deficiency of protein** in the diet. Vegetarian athletes, who do not consume proper amount of protein with their meals may potentially develop exRML

**Creatine supplements** have been used by athletes who require muscle power in a short time and by general public who may wish to increase the muscle mass. However, **over 80% of athletes appear to take much larger amount of the supplements than recommended.** Such excessive intake may cause imbalance in body water, triggering muscle cramps or dehydration, which may be the root cause of renal failure or exRML.

Excessive exercise while taking drugs for medical reasons may lead to potentially adverse drug reactions. (**Non-steroidal anti-inflammatories –Motrin and Naprosyn, statins, steroids, synephrine (similar to phenylpropanolamine or ephedrine)** contained in supplements used for weight loss. Oriental medicine containing **Herba Ephedrae**. It was reported that **alcohol ingestion after exercise** may worsen edema, soreness, and dehydration. Avoid drinks high in **caffeine, soda, energy drinks**, etc.

**It is possible that a viral infection may play a role in the cases of exRML.**

# Exercise Induced Rhabdomyolysis Fact Sheet

## Signs and symptoms:

Changes in the **color of urine** and muscle soreness are common. **Extreme muscle soreness is accompanied by cramps or muscular stiffness, nausea, headache, and fatigue. One of the first signs of dehydration is headache—drink water instead of taking medication!**

## Prevention:

It has been suggested that **warm-up** may be the best approach to improve exercise adherence, as it provides the participant with pre-practice of the actions required for corresponding exercises or games. Warm-ups could also reduce the chance or occurrence of musculoskeletal damage. It may also be useful to utilize the same amount of time for warm-up and cool-down as demanded factual exercise or game. **Enforced hydration is used by DOD during training.**

**High-intensity, longer-duration, and weight-bearing exercise** (eccentric contraction and downhill running) have been found to be responsible for the increase in CK concentration,

In cases of **viral diseases** including diarrhea or vomiting, exercise and training should be modified or abstain from training to prevent possible development of exRML.

Many previous studies have reported that **sufficient intake of water** is effective in preventing heat induced disorders. Normal hydration could ensure the **homeostasis of body temperature.**

When participating in exercise in high temperature, wearing clothing and uniforms that would assist and aid in **heat dissipation and provide a cooling mechanism** should be considered.

To promote the recovery and regeneration of damaged muscles, **ingesting protein together with carbohydrate** is more effective since carbohydrate improves the rate of glycogen synthesis.

Thus, drinking fluids containing **electrolytes** during and after exercise is desirable

## Recovery:

A slow, gradual rehabilitation program. During the 1st stage of a rehabilitation program, manual efforts to secure a range of motions of joints may require some form of discomfort and perhaps some pain. Before recovering from complete joint mobilization, the 2nd stage of rehabilitation should increase gradually. The distal portion of the upper or lower part of the body should be manipulated gradually with very low intensity from 5 to 15 min using a non-weight bearing equipment. If no feeling of discomfort or pain is present within 24 h after the exercise, the 3rd stage of the rehabilitation program could be introduced. In the 3rd stage of the rehabilitation program, isotonic exercises such as stretching of the joints, modified flexion and extension of joints, or bench press should be gradually introduced. Modified flexion and extension of joints should start from forward tilted position with both hands touching the wall, and then proceed to a table, a

footboard, or chairs, and finally to the floor to increase the joint mobility and exercise intensity. In the 4th stage of the rehabilitation program, one set of limited flexion and extension of the joints should be performed together with the normal exercise program. The limits of flexion and extension of joints is to restore performance capability before determination of RML without loss of range of motion of joints or pain.

***Reference: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6188610/***

# Exercise and the environment Overview

Environmental factors such as heat, humidity, altitude, cold and other elements can affect your performance. If you are currently acclimating to a new environment and are used to being outdoors frequently it can still take at least two weeks for your body to acclimate and perform at optimal levels. Your physical condition, age, and other factors also affect how fast you will acclimate to new environments when completing physical activity. It is important you are aware of this during your training and be cognizant your body will need to acclimate if you have yet to attend the National Training Academy.

# Heat related illness

**Heat stroke: What is it?**

The most severe form of heat related illness and is a life-threatening emergency. It is the result of long, extreme exposure to the sun. the person does not sweat enough to lower their body temperature. It is a condition that develops rapidly and needs immediate medical treatment.

**How is a heat stroke caused?**

Our bodies make a tremendous amount of internal heat and we normally cool ourselves by sweating and radiating heat through the skin. In certain circumstance, such as extreme heat, high humidity, or vigorous activity in the hot sun, our cooling system may begin to fail. This allows heat to build up to dangerous levels.

**What are symptoms of a heat stroke?**

Headache, dizziness, disorientation/confusion/agitation, fatigue/sluggishness, seizure, hot/dry skin that is flushed but not sweaty, a high body temperature, loss of consciousness, rapid heartbeat, hallucinations.

**Symptoms may resemble other medical conditions or problems, therefore seek a healthcare provider for a diagnosis.

***Resource: Johns Hopkins Medicine Heat Related Illnesses***

# Dehydration

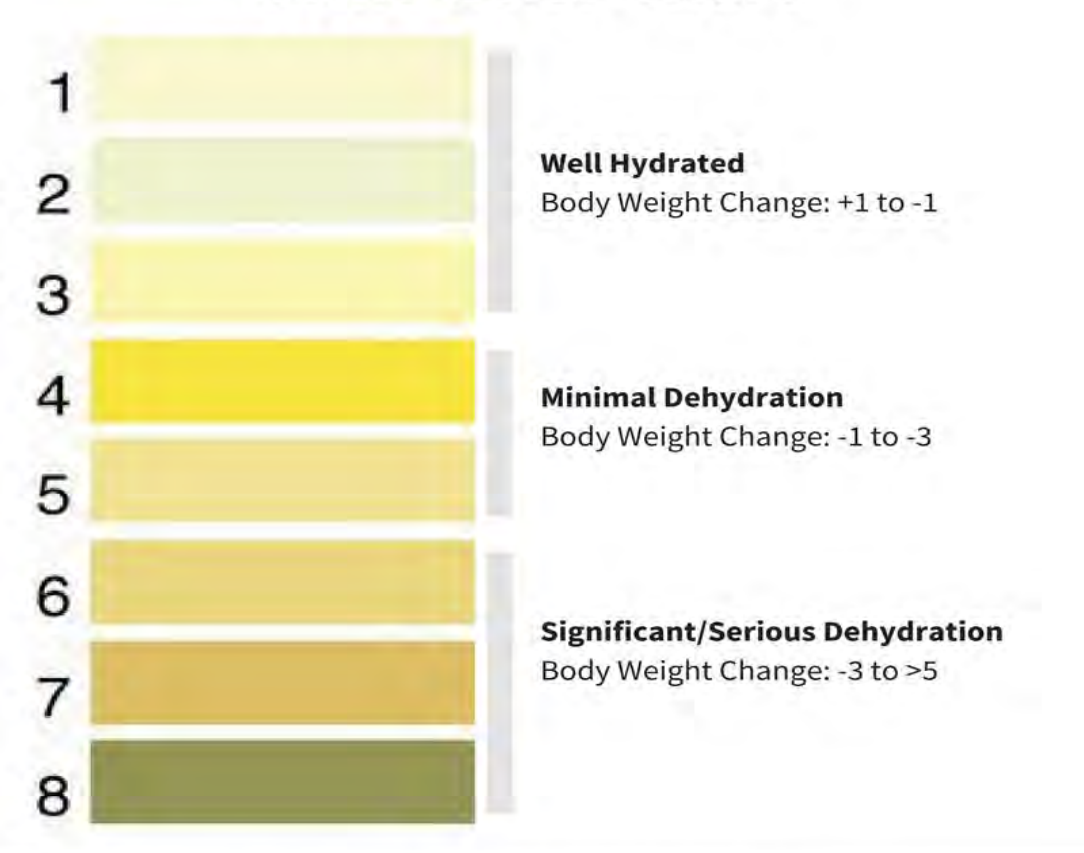
**How can dehydration be prevented?**

Drink plenty of fluids, especially when exposed to the sun
Make sure you are taking in more fluids than you are losing
Drink appropriate amounts to maintain electrolyte balance

**The most common symptoms of dehydration, however everyone may experience symptoms differently. Symptoms may include:**

Thirst
Less-frequent urination
Dry Skin
Fatigue
Light-headedness
Dizziness
Confusion
Dry mouth and mucous membranes
Increase heart rate and breathing

# Urine Color Chart




*International Journal of Sport Nutrition, Volume 4, 1994, pages 265-279*
*Journal of Athletic Training 2000;35(2):212-224*

# Active Recovery Explained

**What is active recovery?**

Opposed to passive recovery which includes a complete break from physical activity, active recovery involves performing very light exercise on your days off. Active recovery allows your body the time it needs to recover while also increasing blood flow to your strained muscles.

**Why active recovery is important to overall health?**

Active recovery workouts are beneficial for your body. They may help you recover faster after a difficult workout. Some benefits include:

- reducing lactic acid buildup in muscles
- eliminating toxins
- keeping muscles flexible
- reducing soreness
- increasing blood flow
- helping you maintain your exercise routine

**Examples of active recovery exercises include, but are not limited to the following:**

Yoga, Swimming, walking, yoga, hiking, light jogging, steady state biking, myofascial release (foam rolling), hip and core activation exercises such as bodyweight glute bridges and planks.

***Resource: https://www.healthline.com/health/active-recovery***

# Phase 1 Program Worksheet

**Date/Name:**

## Directions:

Record your workout by completing the sections contained within this worksheet.

| **Breathing Technique: (select one)** | **Mobility Movement: (write in)** | **Calisthenics Scoresheet: (write in the scoresheet used, i.e., EMOM)** | **Cardio/Endurance: (write in)** | **Breathing Technique: (select one)** | **Compensation Movement: (write in)** |
|---|---|---|---|---|---|
| ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | | | Type:<br>Time: | ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | |
| | | | ◯ Prior ◯ After Calisthenics | | |
| | | | Intensity:<br>◯ High ◯ Medium ◯ Low | | |
| | | | Average Heart Rate: | | |

| **Calisthenic Movements** | **Cardiovascular/Endurance** |
|---|---|
| Front plank for time | **Frequency:** 3x per week |
| Butterfly sit-ups | |
| Step-out Burpee | **Run at least 1x per week.** Remaining days choose from other types of activity list. |
| Split Squat Lunge | |
| Bicycle crunch | **Intensity:** HIGH at least 1x per week |
| Jack Step-Out (no jump) | |
| Plank Jack | **Time:** Begin with 20 minutes and then steadily increase time overall |
| Spider mountain climber | |
| Walk out into cobra pose | **Other types of activity:** |
| Ledge sits | Running (outdoor including trails, treadmill) |
| Squat into frog jump position, stand up, take one step forward with your left. Repeat on the right side. *NO JUMP | Rowing (indoor or crew)<br>Biking (Peloton/outdoor, mountain/road)<br>Boxing<br>Jump Rope (speed or heavy rope)<br>Battle Ropes<br>Versa climber<br>Jacobs Ladder |
| Lateral squat | |

**Recovery:** Select recovery movements to include more compensation movements or from other guides for additional recovery purposes.

CLEAR

# Phase 2 Program Worksheet

**Date/Name:**

## Directions:

Record your workout by completing the sections contained within this worksheet.

| **Breathing Technique:** (select one) | **Mobility Movement:** (write in) | **Calisthenics Scoresheet:** (write in the scoresheet used, i.e., EMOM) | **Cardio/Endurance:** (write in) | **Breathing Technique:** (select one) | **Compensation Movement:** (write in) |
|---|---|---|---|---|---|
| ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | | | Type:<br>Time: | ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | |
| | | | ◯ Prior ◯ After Calisthenics | | |
| | | | Intensity:<br>◯ High ◯ Medium ◯ Low | | |
| | | | Average Heart Rate: | | |

## Calisthenic Movements

| |
|---|
| USMS FIT Standard push-up |
| USMS Fit standard sit-up |
| Burpee |
| Front lunge |
| 6 inches AND Flutter Kicks |
| 4 count jumping jack |
| 8 count body builders |
| Mountain Climber aka Running Planks |
| Squat Thrust |
| Air squat, 5 second total movement |
| Frog jumps |
| Skater jumps |

## Cardiovascular/Endurance

**Frequency:** 5x per week

**Run at least 2-3x per week.** Remaining training days choose from other types of activity list.

**Intensity:** Different variations throughout the 5 days

**Time:** will vary per workout

**Other types of activity:**
Running (treadmill, outside, trail)
Rowing (indoor or crew)
Biking (Peloton/outdoor, mountain/road)
Boxing
Jump Rope (speed or heavy rope)
Battle Ropes
Versa climber
Jacobs Ladder

**Recovery:** Select recovery movements to include more compensation movements or from other guides for additional recovery purposes.

CLEAR

# Phase 3 Program Worksheet

**Date/Name:**

## Directions:

Record your workout by completing the sections contained within this worksheet.

| **Breathing Technique:** (select one) | **Mobility Movement:** (write in) | **Calisthenics Scoresheet:** (write in the scoresheet used, i.e., EMOM) | **Cardio/Endurance:** (write in) | **Breathing Technique:** (select one) | **Compensation Movement:** (write in) |
|---|---|---|---|---|---|
| ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | | | Type:<br>Time: | ◯ Recovery<br>◯ Tactical<br>◯ Heart Focused | |
| | | | ◯ Prior ◯ After Calisthenics | | |
| | | | Intensity:<br>◯ High ◯ Medium ◯ Low | | |
| | | | Average Heart Rate: | | |

## Calisthenic Movements

- Spiderman push-up
- V-ups
- Tuck Jump Burpee
- Walking Lunges
- Hollow flutter kicks
- Plyo Jack
- 10 count body builders
- Plyo Spider
- Squat thrust into sit thru leg
- Air squats, 3 seconds total movement
- Squat thrust into frog jumps
- Skater jumps, into air squat

## Cardiovascular/Endurance

**Frequency:** 6x per week INCLUDING one day of Active Recovery. Examples of active recovery include brisk walking, hiking, and low impact activities.

**Run at least 3x per week.** Remaining days choose from other types of activity list.

**Intensity:** Alter throughout the week to ensure progress continues.

**Time:** Will vary per workout but overall work capacity should vary between 40-90 minutes.

**Other types of activity:**
Running (treadmill, outside, trail)
Rowing (indoor or crew)
Biking (Peloton/outdoor, mountain/road)
Boxing
Jump Rope (speed or heavy rope)
Battle Ropes
Versa climber
Jacobs Ladder

**Recovery:** Select recovery movements to include more compensation movements or from other guides for additional recovery purposes.

CLEAR

# 20 / 10 X 8 + 60

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Sets Scored | | | | | | | | Heart Rate |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Score: Add the lowest of the 8 sets from each of the exercises | Average Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select and record the mobility movements and compensation movements prior to staring the workout.

## 20/10 X 8 + 60 Explained:

Perform 8 sets in a row of an exercise: 20 seconds of exercise with 10 seconds of quick recovery. After each set you have 60 seconds to drive your heart rate down and record your heart rate.
Reminder: You are expected to maintain proper form throughout the workout.

## Description of Workout:

Record your resting heart rate prior to starting. Write down your score for each set in the “SETS SCORED” section above. During the 1-minute recovery in between each exercise, take your heart rate, and write it down under “HEART RATE.” When you finish with your final exercise quickly record your heart rate and repetitions then take 60 seconds to drive your heart rate down. Record your recovery heart rate.

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

CLEAR

# AFAP/T

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Number of Repetitions to Perform |
|---|---|
| | |
| | |
| | |
| | |

| Total Time elapsed for completing all repetitions in Under 20 minutes | Final Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select exercises and build your workout plan prior to starting. Designate a number of repetitions to perform that is consistent for your workout prior to starting. Select and record the mobility movements and compensation movements prior to staring the workout.

## AFAP/T explained:

As Fast As Possible, for a certain amount of time. Reminder: You are expected to maintain proper form throughout the workout.

## Description of workout:

Record your resting heart rate prior to starting. Perform the number of repetitions for each exercise as fast as possible with very good technique, but no longer than twenty minutes.

When you finish with your final exercise quickly record your heart rate and repetitions then take 60 seconds to drive your heart rate down. Record your recovery heart rate.

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

CLEAR

# AMRAP

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Round 1 | | Round 6 | | Round 11 | | Round 16 | |
|---|---|---|---|---|---|---|---|---|
| | Round 2 | | Round 7 | | Round 12 | | Round 17 | |
| | Round 3 | | Round 8 | | Round 13 | | Round 18 | |
| | Round 4 | | Round 9 | | Round 14 | | Round 19 | |
| | Round 5 | | Round 10 | | Round 15 | | Round 20 | |

| Total Time elapsed for completing all repetitions in Under 20 minutes | Final Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select exercises and build your workout plan prior to starting. Select and record the mobility movements and compensation movements prior to staring the workout.

### AMRAP Explained:

As Many Rounds or Reps As Possible. Reminder: You are expected to maintain proper form throughout the workout.

### Description of Workout:

Record your resting heart rate prior to starting. Perform the exercises in circuit-style completing all the repetitions of all the exercises for one “ROUND” point. Complete as many rounds as possible in twenty minutes. When you finish twenty minutes, take your heart rate, and write it down under “HEART RATE.”

Add your points for all the rounds you completed with very good technique. Only 20 possible round points are listed on this sheet. It takes a minimum of approximately 90 seconds to complete a round with good form, therefore this form should suffice your needs.

| Mobility | Compensation |
|---|---|
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CLEAR

# EMOM

| Date | Calisthenics Program Phase Level | Last Name, First Name |
|---|---|---|
| | | |

| Resting Heart Rate | Heart Rate Maximum 220-AGE | Target Heart Rate Range | Recovery Heart Rate (1 Minute After Workout) |
|---|---|---|---|
| | | | |

| Exercises | Round 1 | | Round 6 | | Round 11 | | Round 16 | |
|---|---|---|---|---|---|---|---|---|
| | Round 2 | | Round 7 | | Round 12 | | Round 17 | |
| | Round 3 | | Round 8 | | Round 13 | | Round 18 | |
| | Round 4 | | Round 9 | | Round 14 | | Round 19 | |
| | Round 5 | | Round 10 | | Round 15 | | Round 20 | |

| Score: Total Rounds you completed all repetitions in under 60 seconds | Final Heart Rate |
|---|---|
| | |

## Directions:

Record the date, calisthenics program phase level, and your name. Refer to the program worksheet for the appropriate exercise options within your designated phase level. Select exercises and build your workout plan prior to starting. Select and record the mobility movements and compensation movements prior to staring the workout.

**EMOM Explained:** Every Minute on the Minute. Perform one circuit (all the repetitions of all the exercise) in less than one minute. Reminder: You are expected to maintain proper form throughout the workout.

## Description of workout:

After performing one circuit give yourself one point in the “ROUND” box of the minute you successfully completed (1-20). If you don’t complete them in less than one minute, start over at the beginning of the following minute; and leave that “ROUND” box blank, as you do not get a point for not completing it.

When you finish with your final round (20), take your heart rate, and write it down under “HEART RATE.”

Add your points for all the rounds you completed with very good technique (maximum 20).

| Mobility | Compensation |
|---|---|
| | |
| | |
| | |
| | |

CLEAR

# Calisthenics Training Program Guide


## United States Marshals Service

Training Division, National Training Academy

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## Program Phase 1 : Front plank for time

**Purpose of exercise**

Activates your core which stabilizes your spine and hips to imporove posture, balance and stability. This movement also can ease back pain and potentially improve flexibility in areas such as your shoulders, arms and legs.

**Calisthenics instructions**

1

2

Place forearms on the floor with elbows aligned below your shoulders and arms parallel to your body, about shoulder width apart. Feet should be placed together.

Ensure your body is straight throughout the movement, keeping your glutes and core muscles activated. Head should be in the upright position.

Record your time.

***Common form issues***

*Dropping the hips to the floor, lowering your head, raising your buttocks and hips into the air to alleviate tension (also known as the downward dog position).*

Return to TOC

## Program Phase 2: USMS FIT Standard push-up

**Purpose of exercise** Areas worked include the pectoral muscles, triceps, and anterior deltoids.

**Calisthenics instructions**

1

Hands are placed about shoulder width apart, with fingers pointing forward. If possible, have someone place a fist at the chest area so when going down your chest makes contact with the fist. If someone is not available, you can utilize any safe object that is about 3 inches such as a sponge or tennis ball as a replacement.

2

Starting from the up position (elbows extended), always maintaining a straight back throughout the movement, lower your body to the fist (or other object) and then return to the up position. Hands are to be maintained on the mat/floor during this movement. For instance, this is not a jumping push-up; it not permitted to have your hands off the floor at any time during the push-up.

3

This is one repetition. Resting should be done only in the up position.

*Common form issues* *Raising buttocks and hips into the air (also known as the downward dog position), dropping hips to the floor which is breaking your positioning. Not locking out the elbows on the up position. Hands jumping off the floor resulting in the repitition not counting.*

## Program Phase 3: Spiderman push-up

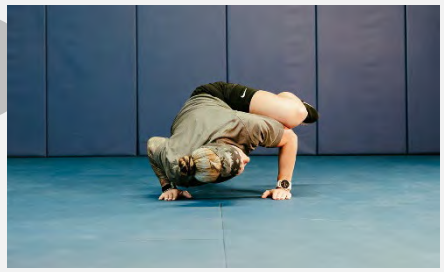
**Purpose of exercise** This mainly works your pectoral muscles, deltoids, and your triceps. This movement adds hip flexion to the push-up exercise.

### Calisthenics instructions

1


2


3


4


Start with your hands about shoulder width apart, and your body in a straight line. Feet are about shoulder width apart.

As you lower your torso towards the floor, bend your elbows out to the side while simultaneously lifting one foot off the floor, bending the knee to the side up to hip level. During this motion you should be squeezing your abdomen area, in particular your obliques.

Your head should look the direction your knee is moving towards your elbow. Try to hold the position for one (1) second. As you press back up, return the leg back to the starting position and bring your head back to the neutral position.

Repeat this action, alternating sides. Completing both knees to the elbows counts as one repetition.

*Common form issues* *Dropping the hips to the floor which breaks the position.*

## Program Phase 1: Butterfly sit-ups

Purpose of exercise — Upper abdominal area as well as the rectus abdominus.

Calisthenics instructions

1


2


3


Lie faceup with the soles of your feet together with your head off the floor. Let your knees fall to the sides as you open your hips/legs. Your arms are over your head and extended.

Sit up and extend your hands towards your toes. Make sure that you lift your upper body from the lower position in one fluid motion without using any momentum.

Lower your torso slowly. The slower your movement, the more you will engage your abdominal muscles.

When your shoulder blades make contact with the floor one repitition is counted.

*Common form issues* — *Kipping (raising the hips off the floor while bringing your body to the up position).*

## Program Phase 2: Sit-up (USMS FIT Standard)

**Purpose of exercise**

Works the rectus abdominus, transverse abdominus and obliques in addition to your hip flexors, chest, and neck. This promotes good posture by working your lower back and gluteal region. This tests your abdominal strength.

**Calisthenics instructions**

1

Start by lying on the back, knees bent, heels flat on the floor with the fingers laced and held behind the head (do not cup the ears). A partner holds the feet down firmly, using only their hands (no knees or additional body weight is allowed). The partner is not permitted to hold behind the ankles.

If you do not have a partner, place the top to mid portion of your feet under an object such as a couch. Any object that has enough weight that during the movement will not shift.

2

In the up position, touch your elbows to knees then return until the shoulder blades touch the floor. Ensure your neck remains in the neutral position during this movement.

3

Resting position is in the up position only.

When your shoulder blades make contact with the floor one repitition is counted.

4

*Common form issues*

*Kipping (raising your hips off the floor) and fingers not staying laced together during the entire movement. Resting in the down position (shoulder blades on the floor) which is not permitted.*

## Program Phase 3: V-ups

Purpose of exercise — Promotes balance and stability, particularly within your transverse abdominus (the powerhouse of your entire body).

### Calisthenics instructions

1


2


3


4


5


The starting position of this exercise is lying down on your back on the floor having your arms extended straight back behind your head. Your legs should be fully extended.

Bend at your waist while raising your legs and arms (simultaneously) to meet forming a jackknife position. Lower your arms and legs back to the starting position.

When your shoulder blades contact the floor and your legs are back to the starting position, this is one repetition.

### *Common form issues*

*This is a coordinated movement; therefore, some initially struggle with moving the upper and lower body at the same time. Also, failing to return to the starting position is a common form issue which shows weakness in the core area.*

Return to TOC

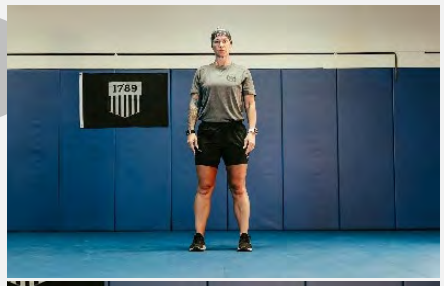
## Program Phase 1: Step-Out Burpee

**Purpose of exercise**

This movement challenges many muscles in both your upper and lower body, as well as your core. This movement is a full body exercise.

**Calisthenics instructions**

1



2

3

Start in a standing position with your feet about shoulder width apart. Lower your hands to the floor in front of you so they're just inside your feet. This is a squat position with your hands on the floor.

Step your left foot and move it back behind you past your hip area (this alleviates any jumping motion). Step your right foot and move it back behind you. Check your position, since at this time you should be in the plank position. Your head is to remain neutral.

Pause and then bring the right foot in (back near your hands), and then step the left foot (back near your hands).

Look ahead at Program Phase 2 and you will be able to see the difference. Program Phase 1 lacks doing the push-up and jumping at the end of the burpee.

Each time you resume to the starting position, this counts as one repetition.

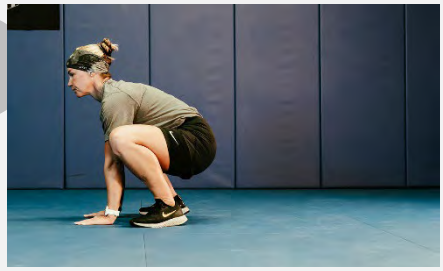
4

5

*Common form issues*

*Dropping the hips to the floor which is common as your hip flexors begin to get fatigued.*

6



Return to TOC

## Program Phase 2: Burpee

**Purpose of exercise** A full body movement that can assist in building your conditioning and endurance when incorporated in a regular fitness routine.

### Calisthenics instructions





Start in a standing position with your feet about shoulder width apart. Lower your hands to the floor in front of you so they're just inside your feet. This is a squat position with your hands on the floor.

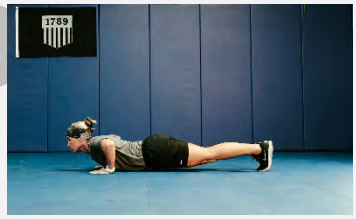
With your weight on your hands, kick your feet back so you're on your hands and toes in a pushup position. Keeping your body straight from head to heels, complete one pushup.

Do not let your hips go towards the floor. Do a frog kick by jumping your feet back to their starting position. Stand and reach your arms over your head, while simultaneously jumping into the air. After jumping land with your knees bent so you can complete another repetition immediately.

Each time you resume to the starting position, this counts as one repetition.

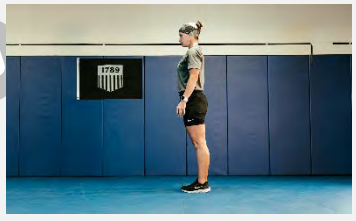
*Common form issues*

*Not completing the pushup during the exercise and not doing the jump. Both are required to complete the repetition.*








Return to TOC

## Program Phase 3: Tuck Jump Burpee

**Purpose of exercise**

Helps develop explosive power and is considered a high-impact exercise. Muscles for further development include glutes, hamstrings, quadriceps, calves, and core.

**Calisthenics instructions**




Start in a standing position with your feet about shoulder width apart. Lower your hands to the floor in front of you so they're just inside your feet. This is a squat position with your hands on the floor.

With your weight on your hands, kick your feet back so you're on your hands and toes in a pushup position. Keeping your body straight from head to heels, complete one pushup.

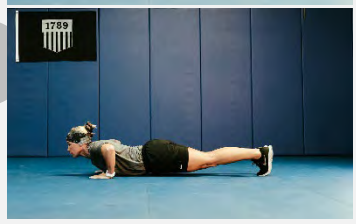
Do not let your hips drop to the floor. Complete a frog kick by jumping your feet back to their starting position. Jump up, raising your knees to your chest to complete a tuck jump.

This will count as one repetition.

For maximum performance do these towards the beginning of your workout, rather than towards the end.


*Common form issues*

*When overfatigued you may start to lean forward while completing the tuck jump portion.*









Return to TOC

## Program Phase 1: Split Squat Lunge

**Purpose of exercise**

Target muscles include the legs, hips, and abdomen area, primarily focusing on the quadriceps, hamstrings, and glutes. This can further improve joint stability and coordination.

**Calisthenics instructions**





This is a static movement, meaning you hold a muscle group long enough to have it physically exert you. In this exercise the quadricep muscle is the area you are exerting.

Stand with your feet about shoulder width apart. Take a large step forward as you perform a lunge. Keeping your torso straight, lower slightly until your back knee *almost* touches the floor, reaching a 90-degree angle, then push back up.

The heel of your back foot should be raised. Push back up and return to the starting position.

Your rear knee should remain parallel to the floor and your front knee should not go beyond your toes. Keep your hands up when doing this exercise and maintain your head in an upright position.

Complete the right and left side to equal one repetition.

***Common form issues***

*Leaning forward rather than maintaining a straight torso, which is compensating for tight hip flexors. When fatigued people tend to drop their hands down as well.*

Return to TOC

## Program Phase 2: Front lunge

**Purpose of exercise**

Lunges increase muscle mass to build up strength especially in your core, buttocks, and legs. This also improves your posture and range of motion.

**Calisthenics instructions**


1

Start by standing up tall with your hands up. Your elbows should be bent to keep your hands up and face protected. Take a large step forward and lower your body until your knee *almost* touches the floor reaching a 90-degree angle. Your rear knee should remain parallel to the floor and your front knee should not go beyond your toes. Maintain your head in an upright position.


2

Lift your front lunging leg to return to the starting position. Once you return to the starting position your other foot should already be moving to the next lunging position. This exercise is a continuous motion and no pausing at any time is permitted. Once the foot is picked up to return to the starting position and is placed on the floor, the other foot then steps into a lunge.


3

Keep your core engaged, shoulders relaxed and your upper body straight throughout the movement.


4

Complete lowering your right knee and left knee to equal one repetition.

*Common form issues*

*Leaning forward rather than maintaining a straight torso, which is compensating for tight hip flexors. When fatigued people tend to drop their hands down as well.*

Return to TOC

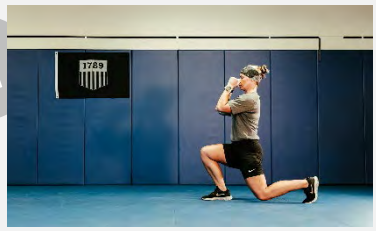
## Program Phase 3: Walking Lunges

**Purpose of exercise**

This can be more difficult than the front lunge for some due to the stabilization of the core area throughout the movement. This exercise assists with correct form with regards to knee stabilization. To ensure the knee does not go pass the toe during this movement helps put less pressure on your joints. This is a dynamic movement.

**Calisthenics instructions**

1


2


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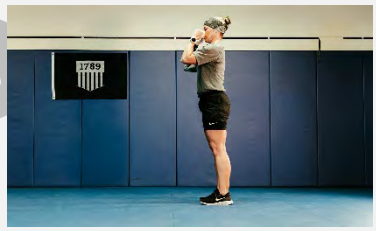

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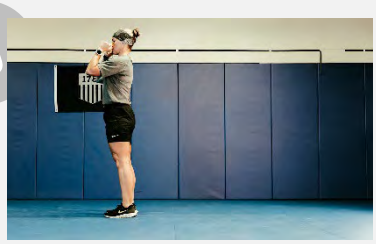


Stand up straight with your feet shoulder width apart. Your elbows should be bent to keep your hands up and face protected. Step forward with your right leg, putting the weight onto your heel. Bend the right knee, lowering down so that it's parallel to the floor in a lunge position.

From the lower lunge position, use your quadriceps and gluteal region to raise up, lifting your left foot into the front lunge position going down immediately into a lunge.

To assist in familiarizing yourself with walking lunges practice by bringing your feet together prior to starting another lunge, pause to ensure you are not using momentum into the next lunge. As you improve you should be able to complete the walking lunge without taking a step in between the movement. *The end goal of this movement is that it be dynamic as possible. For example, no pause in between lunges and not bringing your feet together in between the lunges.

Repeat this movement, "walking" forward as you lunge, alternating legs. Throughout the movement you should keep your core engaged and your upper body should remain tall and aligned upright.

Walking lunge on your right foot leading, then walking lunge on your left foot leading equals one repetition.

*Common form issues*

*When stepping out the knee extending pass the foot, which will put additional pressure on your knee. Leaning forward with your upper body, demonstrates tight hip flexors and/or poor strength in the quadricep area.*

Return to TOC

## Program Phase 1: Bicycle crunch

**Purpose of exercise** Activates and strengthens the rectus abdominis, your upper abdominal muscle and works your obliques.

**Calisthenics instructions**

1

2

3

Lie flat on the floor with your lower back pressed to the floor and knees bent. Your feet should be about one (1) inch off the floor. Your hands are behind your head with fingers laced together. Contract your core muscles, drawing in your abdomen to stabilize your spine.

With your hands gently holding your head, pull your shoulder blades back and slowly raise your knees to about a 90-degree angle, lifting your feet from the floor.

Exhale and slowly go through a bicycle pedal motion. Bring one knee up towards your armpit making contact with your opposing elbow, while straightening the other leg, keeping both elevated higher than your hips. You should rotate your torso so you can touch your elbow to the opposite knee as it comes up.

Upon completing both sides (right/left) touching your opposing knee, this counts as one repetition.

When comfortable with the position, change the cadence of your elbow to knees.

*Common form issues* *Hips rotating, rather than your torso rotating. Lower back raising during the movement, instead of having it pressed into the floor. Be conscientious about straining your neck. Do not pull your head forward.*

## Program Phase 2: 6 inches AND Flutter Kicks

### 6 inches

Purpose of exercise — An isometric exercise that works your abdominal area.

Calisthenics instructions

1

2

Lie on your back with your hands underneath your buttocks area (tailbone).

Raise your head and keep it off the floor throughout the exercise. Keeping your core activated lift your legs up, maintaining straight legs, and raise your feet to where they are six inches off the floor.

Hold this position at the six inches level.

Record your time.

*Common form issues* — *Dropping the legs and/or feet to the floor when unable to maintain the position for any longer. Placing your head to the floor during the movement. Not holding at six inches, such as starting above six inches showing lack of abdominal strength.*

## Program Phase 2: 6 inches AND Flutter Kicks

### Flutter Kicks

**Purpose of exercise** An exercise that works the muscles of your core, specifically the lower rectus abdominal muscles, plus the hip flexors.

**Calisthenics instructions**

1

2

3

4

Place both your hands underneath your buttocks area (tailbone).

Keep your head raised off the floor during this entire movement. Keep your lower back on the floor as you lift the right leg off the floor slightly past hip height and lift the left leg, so it hovers a few inches off the floor.

Switch which foot is in the air by having one leg up and one leg maintaining six inches, while you simultaneously rotate them.

Do this exercise and practice different ranges of motion and speeds. Also incorporate pausing when one leg is raised.

This is a four-count movement. For example, the right leg/foot raised (starting position), left leg/foot raised (count 1), right leg/foot raised (count 2), left leg/foot up (count 3), right leg/foot raised (count 4) for a total of one repetition.

*Common form issues*

*Dropping the legs and/or feet to the floor when unable to hold the position for any longer. Placing your head to the floor during the movement.*

Return to TOC

## Program Phase 3: Hollow body flutter kicks

**Purpose of exercise** An exercise that works the muscles of your core, specifically the lower rectus abdominal muscles, plus the hip flexors.

### Calisthenics instructions

1


2


3


4


Starting on the floor raise your hands and arms above your head in which you will maintain the position throughout. You are creating a hollow body hold, which keeps the abs engaged and should then have the effect to keep your shoulder blades off the floor.

Activating your core, complete the flutter kick exercise (described in Program Phase 2) by raising one leg at a time. This is a four-count exercise. Arms above your head, rather than underneath your tailbone adds resistance which is making your core work harder.

Upon completing bringing your left foot and right foot up, this counts as one repetition.

Reminder: Your hands are to remain above your head during this movement rather than underneath your lower back (compare to flutter kicks in Program Phase 2).

### *Common form issues*

*Dropping your head and/or arms to the floor when fatigued. Not engaging your abdominal section enough to have your shoulder blades off the floor.*

## Program Phase 1: Jack Step-Out (no jump)

**Purpose of exercise**

Used to get your heart rate quickly elevated this full body movement has your body moving in a different plane of motion. Moving the frontal plane of motion to strengthen your body from a different direction with the lateral movement strengthens your hips and gluteal region while working your core and upper body as you get your blood pumping.

**Calisthenics instructions**







This is a stepping exercise instead of a jumping exercise. This takes out the impact of the jumping jack (see Program Phase 2 description).

Stand tall with your arms by your sides. Step your right foot out to the side and place your toe facing out wide. Simultaneously swing your arms out to the sides and up overhead while simultaneously going into a squat position.

Step your right foot back in and bring your hands back down by your sides. Do this with your left foot next.

After stepping out to each side, this counts as one repetition.

When comfortable doing so it is recommended to speed up the pace to make the exercise more challenging.

*Common form issues*

*Not being able to coordinate your hands being overhead when your foot is out to the side at the same time. Bending forward at the waist to compensate for tight hip flexors or weak lower back area.*

## Program Phase 2: Jumping Jack (4 count movement)

**Purpose of exercise** This high impact plyometric movement helps build your stamina for cardiovascular endurance.

**Calisthenics instructions**






Start standing nice and tall with your feet together and arms down by your sides. You will then jump both your feet out to the sides so that your feet are a little wider than shoulder width apart. As you jump your feet out wide, raise your arms to the sides and overhead. The movement of your feet and hands going overhead is done simultaneously.

Then bring your arms back down to your sides as you jump your feet back together. Repeat, jumping your feet out as wide as your raise your arms out to the sides and overhead.

Starting position: hands by your sides, feet together

Count 1: hands above head, feet out wide

Count 2: hands by your side, feet together

Count 3: hands above head, feet out wide

Count 4: 1 repetition completed (say 1 out loud for practice)

This counts as one repetition.

*Common form issues* *Lacking the coordination to move arms and feet simultaneously, therefore being off count.*

## Program Phase 3: Plyo Jack

**Purpose of exercise** Used as a power exercise and known to be an explosive movement that works your legs and gluteal region.

### Calisthenics instructions

1


2


3


4


Stand tall with your feet together and your arms down by your sides. Then just slightly squat, pushing your buttocks back. You are loading your glutes so you can explode up off the floor.

You will then perform the same movement as the 4 count Jumping Jack, but instead of jumping your feet out wide on the floor, you will explode up off the floor as you jump your feet out wide.

As you jump up off the floor raising your legs to the sides, you will swing your arms out to the sides and up overhead. To land, bring your feet back together and sit back into the squat position.

This counts as one repetition.

### *Common form issues*

*Bending over at the waist too much, resulting in leaning your upper body over your knees in the starting position. If this happens in between repetitions, try to focus on lifting your upper chest area prior to jumping.*

## Program Phase 1: Plank Jack

Purpose of exercise — This works your shoulders, abdominals, gluteal region, and legs while getting your blood pumping.

### Calisthenics instructions



Start in the high plank position with your hands under your shoulders and your feet together. Your body should be in a straight line from your head to your heels.

Engage your core area throughout the movement. Jump your feet out wide to each side so they are just wider than shoulder width apart. Then quickly jump them back together.

Repeat, this jumping movement. Your feet will go out to the side and back to the starting position counting as one repetition.



*Common form issues*

*Having your buttocks go up in the air which shows you are not keeping your core engaged. Hips dropping towards the floor which is showing the lack of core engagement. Having your hands extending out in front of your shoulders, rather than underneath your shoulders resulting in undue pressure on your shoulders.*

## Program Phase 2: 8 count body builders

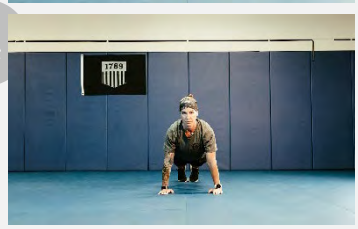
**Purpose of exercise**

This is a full body movement that works the muscles of the arms, legs, hip flexors, lats, pectorals, and shoulders as well as the core.

**Calisthenics instructions**








Each count has a specific movement assigned to it. It is recommended you count out loud during completion of this exercise.

Stand with feet shoulder width apart with your hands by your sides. Bend into a squat position and place your hands a little wider than shoulder width apart on the floor (count 1). Kick your legs back so that you are now in the high plank position (feet together) and your body is in a straight line (count 2). Down push-up position (count 3). Rise to up push-up position (count 4). Separate your feet into a jack position (feet out) while maintaining the high plank position (count 5). Bring your feet back together while in a high plank position (count 6). Bring feet in towards hands into the lower squat position (count 7). Stand up to the starting position (count 8).

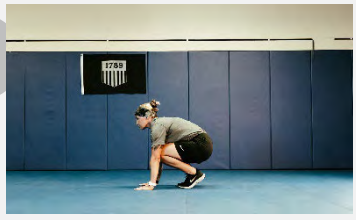
This equals one repetition. Photographs line up with the specific count:

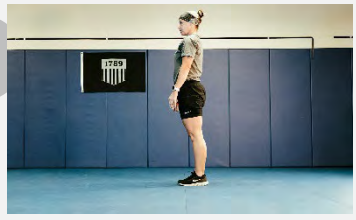
Count 1 - Count 2 - Count 3 - Count 4 -
Count 5 - Count 6 - Count 7 - Count 8

*Common form issues*

*Failure to complete the push-up in proper form. Not being able to complete the movement with the proper form and in the order specified.*






Return to TOC

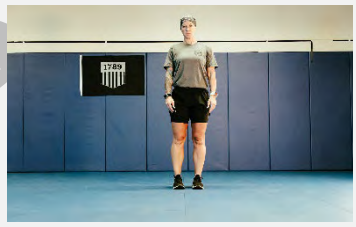
## Program Phase 3: 10 count body builders

**Purpose of exercise**

This is a full body movement that works the muscles of the arms, legs, hip flexors, lats, pectorals, and shoulders as well as the core.

**Calisthenics instructions**

Start



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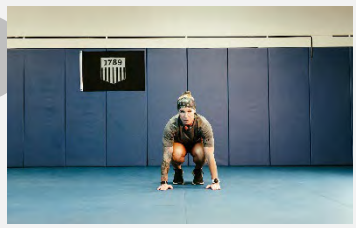

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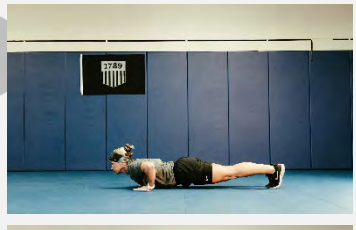

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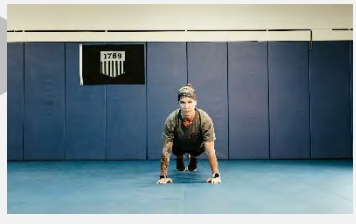

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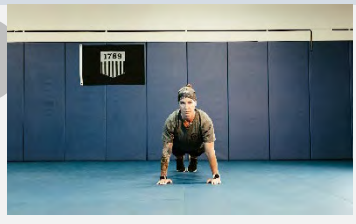

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7

Each count has a specific movement assigned to it. It is recommended you count out loud during completion of this exercise.

Stand with feet shoulder width apart with your hands by your sides. Bend into a squat position and place your hands a little wider than shoulder width apart on the floor (count 1). Kick your legs back so that you are now in the high plank position (feet together) and your body is in a straight line (count 2). Down push-up position (count 3). Rise to up push-up position (count 4). Separate your feet into a jack position (feet out) while maintaining the high plank position (count 5). Bring your feet back together while in a high plank position (count 6). While planking, turn towards the right side and raise your right hand straight above you so that you are in a side plank position (count 7). Return the right hand to the floor.

*Continued on the next page*

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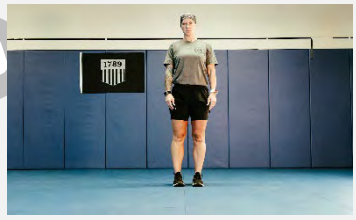


While planking, turn towards the left side and raise your left hand straight above you so that you are in a side plank position (count 8). Return the left hand to the floor.

Bring your feet in towards your hands into the lower squat position (count 9).

Stand up returning to the starting position (count 10).

This counts as one repetition. Photographs line up with the specific count:

Complete Counts 1-10

Recommended to complete in various speeds when comfortable with the movement.

*Common form issues* *Failure to complete the push-up in proper form. Not being able to complete the movement in the order specified.*

## Program Phase 1: Step up

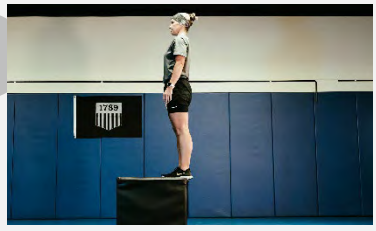
**Purpose of exercise**

This exercise works all the major muscle groups in your lower body. The quadriceps bear the brunt of the action but the movement works your hamstrings, gluteal region and calves. This will improve your strength and build resilence for sports such as running.

**Calisthenics instructions**

1


2


3


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You can use a flat bench or another stable platform for this movement if the height is appropriate. You do not want to feel like you're overreaching. Regarding the appropriate height, make sure the bench or platform is just under knee height (you do not want the step to be too high). Also make sure you select an area near the bench/platform that is as level as possible and dry in texture since you will be placing your body down one foot at a time.

Stand tall facing the bench/platform with your arms by your sides. Lift and place your entire foot on the bench/platform. Drive up through your heel and leg muscles while slightly leaning forward to bring your other foot up onto the bench/platform. At the top of the bench/platform your feet should be about shoulder width apart. Be sure to stand up tall on the bench/platform to ensure you have full hip extension. Pause.

Step down, one foot at a time placing your foot on the floor. This is a controlled movement, so ensure you keep your core engaged and feel your lower body muscles working.

Alternating stepping up with the left leg and then the right leg. Upon completing this counts as one repetition.

*Common form issues*

*Upon stepping up leaning so far forward that your knee is over your toe. This places undue pressure on your knees.*

## Program Phase 2: Box Jump

(preferably on a 24 Inch Box/surface)

**Purpose of exercise**

This exercise will strengthen and tone the lower body, increase vertical jump height and develop your power output. This is a high impact exercise which targets your quadriceps and gluteal region. This movement demands coordination, accuracy, agility and balance. It is recommended this movement be done earlier, rather than later in your workout regimen to reduce likelihood of injury. This is recommended due to jumping and being unable to completely get yourself on the box/surface becomes harder when your legs are fatigued.

**Calisthenics instructions**

1


2


3


If you are newer at completing this movement, choose a box/surface that is on the shorter side. For example, those persons about 5 feet 9 inches or taller choose a 16–20-inch box/surface. If you are 5 feet 4 inches tall choose a 14–16-inch box.

Stand with the box one short step in front of you and your feet about shoulder width apart. Bend your knees slightly and drop down, bringing your arms out behind you.

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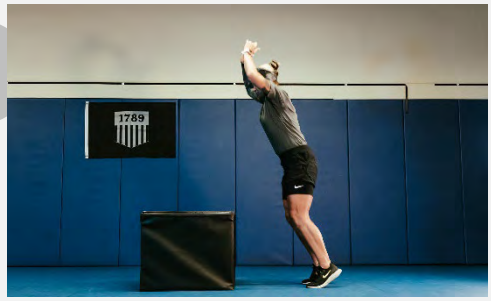
4



Use the momentum from your quarter squat to propel you upward as you jump onto the box, allowing your arms to swing out in front of you.

Land softly on both feet with a slight bend in the knees. Both of your feet, in their entirety, should be located on the box/surface.

5

Ensure your hips are fully extended when you are at the top of the box/surface for the repetition to count. When on top of the box/surface your arms can be down by your side, as this is a natural reaction due to the explosive movement to then relax your arms.

Step back down (one foot at a time) to the starting position.

6

This counts as one repetition.

If you choose you can jump down from the box/surface, however, know that this is not necessary and puts additional pressure on your knees over time.

7

*Common form issues*

*Both feet not landing completely on the box/surface, which is a safety issue since your full body needs to be on the box/surface after jumping to complete the movement for stabilization. Failing to fully extend the hips at the top of the box/surface, which is not completing the movement in its entirety.*

8

## Program Phase 3: Burpee Box Jump

### Purpose of exercise

This combination of the burpee into a box jump will increase your cardio endurance and further improve your ability to develop your power output. It is recommended you initially place this at the beginning of your workout routine. As you build your endurance further then place this exercise in the middle and end of the workout.

The burpee is a full body movement that can assist in building your conditioning and endurance when incorporated in a regular fitness routine.

The box jump portion of the exercise will strengthen and tone the lower body, increase vertical jump height and develop your power output. This is a high impact exercise which targets your quadriceps and gluteal region. This movement demands coordination, accuracy, agility and balance. It is recommended this movement be done earlier, rather than later in your workout regimen to reduce likelihood of injury. This is recommended due to jumping and being unable to completely get yourself on the box/surface becomes harder when your legs are fatigued.

### Calisthenics instructions

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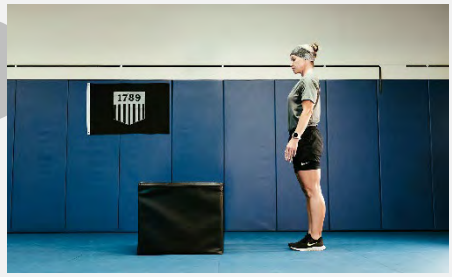
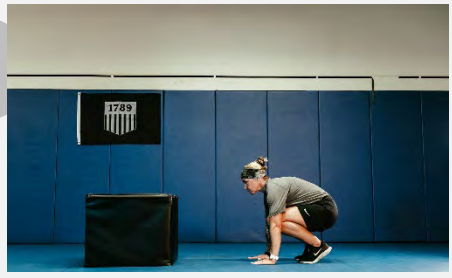


Start in a standing position with your feet about shoulder width apart.

2



Lower your hands to the floor in front of you so they're just inside your feet. This is a squat position with your hands on the floor.

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3

With your weight on your hands, kick your feet back so you're on your hands and toes in the "up" pushup position.

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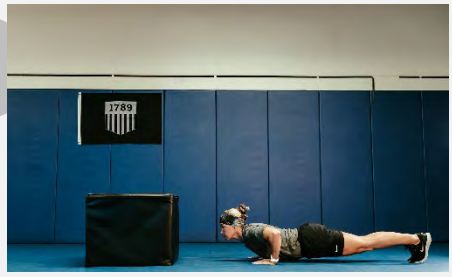

Keeping your body straight from head to heels, complete one pushup.

Do not let your hips go towards the floor. Do a frog kick by jumping your feet back to their starting position.

5

At this position, prior to doing to the box jump check your positioning to ensure you are about one short step in front of the box/surface. Have your feet about shoulder width apart.

Bend your knees slightly and drop down, bringing your arms out behind you.

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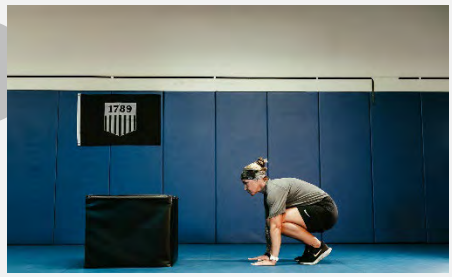

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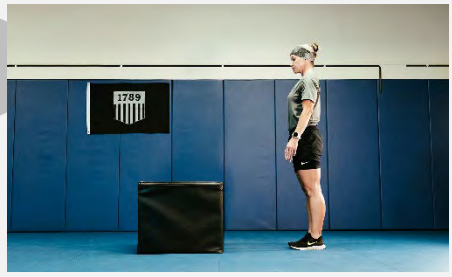

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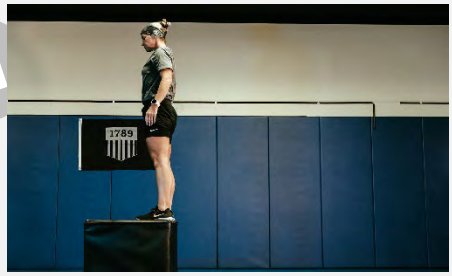

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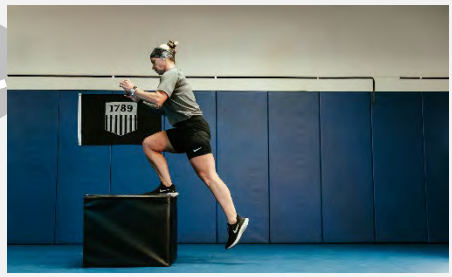


13

Use the momentum from your quarter squat to propel you upward as you jump onto the box, allowing your arms to swing out in front of you.

Land softly on both feet with a slight bend in the knees. Both of your feet in their entirety should be located on the box/surface.

Ensure your hips are fully extended when you are at the top of the box/surface for the repetition to count. When on top of the box/surface your arms can be down by your side, as this is a natural reaction due to the explosive movement to then relax your arms.

Step back down (one foot at a time) to the starting position. Upon completing the box jump portion, this counts as one repetition for the exercise.

If you choose you can jump down from the box/surface, however, know that this is not necessary and puts additional pressure on your knees over time.

*Common form issues*

*Failing to lock out elbows during the push-up portion of the exercise, commonly due to fatigue. Both feet not landing completely on the box/surface, which is a safety issue since your full body needs to be on the box/surface after jumping to complete the movement for stabilization. Failing to fully extend the hips at the top of the box/surface, which is not completing the movement in its entirety.*

## Program Phase 1: Spider Mountain Climber

**Purpose of exercise** This movement works your gluteal region, legs, triceps, and shoulders. It also strengthens your core in a dynamic way. Most of your power is generated from your core.

**Calisthenics instructions**

1


Start in a push-up position with your hands shoulder width apart directly beneath your shoulders.

Ensure you're squeezing your abs during this movement while keeping your body in a straight of a line as possible. This is a stepping motion, not a jumping movement.

2


Move your left foot and bring it towards your left hand. Pause for one second in this position. Return your foot back to the starting position, placing it alongside your other foot.

Complete this on the right side and then the left side.

3


This completes one repetition.

***Common form issues*** *Elbows bending, lifting hips too high, rounding your lower back.*

## Program Phase 2: Mountain Climber (Running Planks)

**Purpose of exercise** This dynamic movement helps build a stable core and boost your heart rate quickly.

**Calisthenics instructions**


Start in a push-up position with your hands shoulder width apart directly beneath your shoulders.


As quickly as you can, pull your right knee towards your chest without letting it touch the floor then return to the starting position.


Once your right knee is towards your chest as you return it to the starting position bring your left knee up towards your chest.

This is to be completed in a fluid motion, meaning there is no rest in-between. There is constant movement with one knee always being at your chest.


Ensure you're squeezing your abs during this movement while keeping your body in as straight of a line as possible. Your buttocks should only be raised high enough to allow for you to bring your knee to your chest.


After you bring both knees towards your chest (one right/one left) this completes one repetition.

*Common form issues* *When your buttocks area is too high, you tend to lean forward placing undue stress on your shoulders.*

## Program Phase 3: Spider Plyo Mountain Climber

**Purpose of exercise**

This movement targets your core and hips. This is also a dynamic movement that helps build a stable core and boost your heart rate quickly.

**Calisthenics instructions**






Start in a push-up position with your hands shoulder width apart directly beneath your shoulders.

As quickly as you can, pull your right knee towards your right hand (outside near your elbow) without letting it touch the floor then return to the starting position. Keep your tailbone tucked during this movement.

Bring the right foot back to the starting position and then completed the same with the left foot. This is a fluid movement in which you are constantly bringing one foot up towards one of your hands. Focus on driving the hips down upon landing your foot.

Ensure you're squeezing your abs during this movement while keeping your body in as straight of a line as possible.

When you complete both feet towards your hand (one right/one left) this completes one repetition.

*Common form issues*

*The tail bone not staying tucked, resulting in your buttocks very high in the air (downward dog position). Dropping your upper body too low, usually a result of fatigue. This effects the positioning and shows that your core is not staying constantly engaged.*

Return to TOC

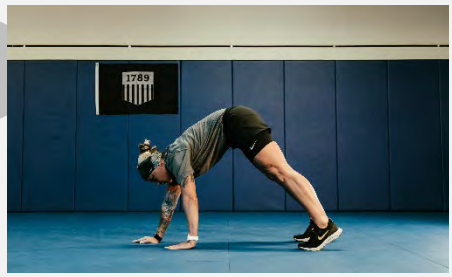
## Program Phase 1: Walk-out cobra

**Purpose of exercise** This movement is known as a dynamic warm-up that stretches the hamstrings, hip flexors, and abdominals.

### Calisthenics instructions


Start in a standing position with your feet shoulder width apart and your shoulders pulled back.


Slowly bend forward keeping your lower back flat and emphasizing the stretch of your hamstrings as you use your hands to walk out into a plank position, starting as close as possible to your feet.




Once you are in a plank position, lower your hips to the floor and lift your chin up towards the ceiling and stretch your abdominal muscles.


Raise your torso upward.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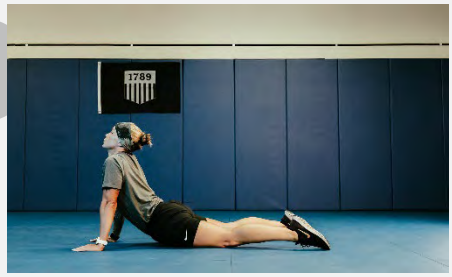

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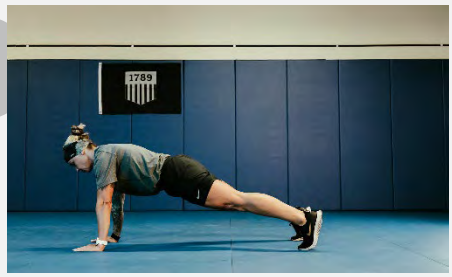

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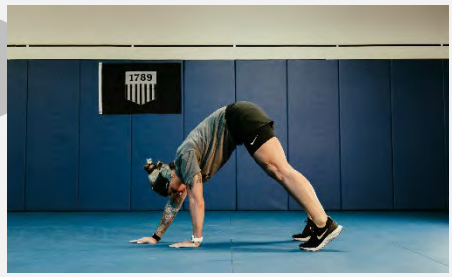

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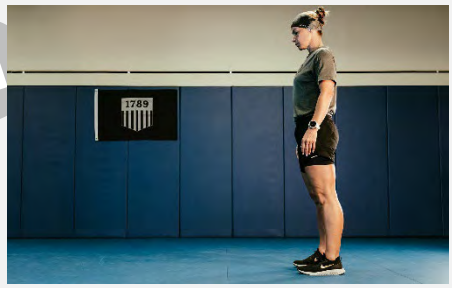

Focus on using your back muscles to lift your torso off the floor and just use your arms for support. Tuck your toes so that if wearing shoes, the laces portion is on the floor.

After feeling the stretch, slowly lower your torso and return to your original position; including moving your toes/feet back to a position where your laces are off the floor.

When you resume back to the plank position, use your hands to slowly walk back to the starting position.

Raise your torso up and stand up to complete the movement.

This completes one repitition.

*Common form issues*

*Moving too fast during the movement will not allow for your body to be stretched and strengthen areas properly. To mitigate this ensure you focus on the steps within the movement and not rush through them.*

Return to TOC

## Program Phase 2: Squat Thrust

**Purpose of exercise**

This movement builds explosiveness in the lower body to include quadriceps, hamstrings, and gluteal region. This movement is also good for improving overall hip mobility and cardiovascular endurance.

**Calisthenics instructions**

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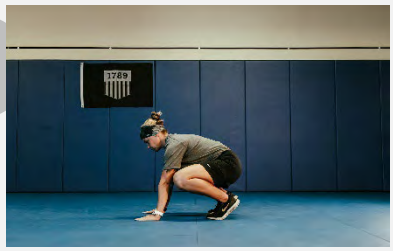
2


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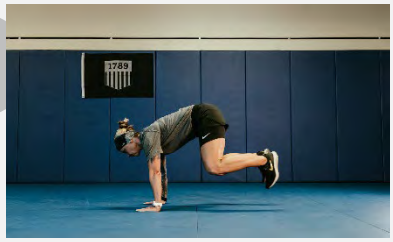

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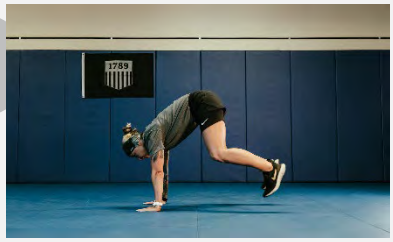

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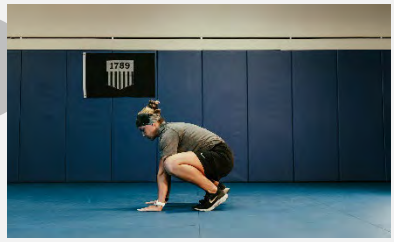


1


Stand tall with your feet shoulder width apart and hands up to protect your face. Bend down and place your hands on the floor before kicking your legs back into the pushup position. Feet should land shoulder width apart.

During this movement keep your hands in place on the floor, back flat, and core engaged. Quickly spring your legs forward to the bottom of a squat and stand up to the starting position.

As you come up ensure to bring your hands up to protect your face.

This counts as one repetition.

*Common form issues*

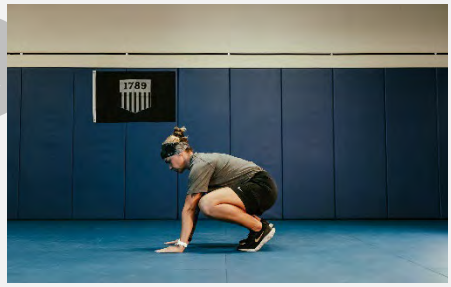
*Arching your back due to compensating for tight hips. If your hips are tight you may struggle at getting full extension when kicking legs out. If you lack strength or flexibility in the hips, you may struggle bringing legs back into the lower squat position.*

## Program Phase 3: Squat Thrust into Leg Through

**Purpose of exercise** This movement will build your hip mobility and endurance as well as work your leg and abdominal muscles.

### Calisthenics instructions

1


2


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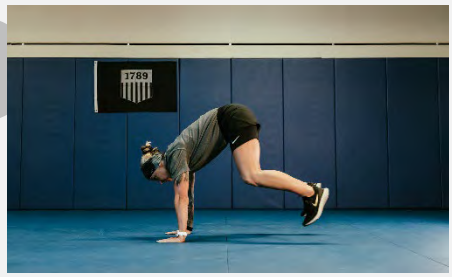

Stand tall with your feet shoulder width apart and hands up to protect your face.

Bend down and place your hands on the floor before kicking your legs back into a pushup position.

Quickly spring your legs forward to the bottom of a squat and jump back to the starting position.

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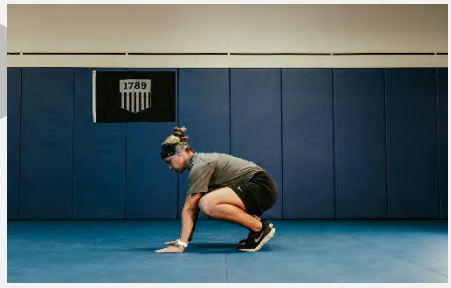

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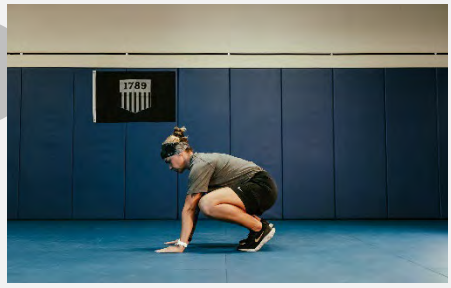


9

Maintain your hands in the same position and bring your knees near your elbows so that you're positioned directly over your wrists for the next movement.

Curl your toes under so the balls of your feet are touching the floor and lift your knees off the floor. Take one hand off the floor and pull your elbow back towards your hip as you then extend the other leg through. Rotating at the hips and keeping the core engaged, then lift the hip area slightly and bring the leg back through. Take note you are not kicking your entire leg through; you are dropping your right hip to bring your right knee pass your midline area.

After completing one leg through return to the center position and complete the same movement with the other leg. Upon completing both leg through's (right/left) return your body position to center.

Return to the starting position by standing up.

This completes one repetition.

*Common form issues*

*Arching your back, commonly associated with compensating for tight hips. If you lack strength or flexibility in the hips, you may struggle bringing legs back into the lower squat position. When fatigue sets in people tend to lean over shoulders in the leg through position, placing undue pressure on your shoulder.*

## Program Phase 1: Ledge Sit

**Purpose of exercise** This exercise strengthens the muscles in the abdomen, thighs, and gluteal region.

### Calisthenics instructions

1


2


3


4


Prior to starting the exercise have a stationary object and check your positioning to ensure you can reach the ledge of the object and that you are not overreaching. Ensure there are no wheels or obstructions around the object for safety purposes.

Start in the standing position, with your arms by your sides. Keeping your core and lumbar tight ensure your toes are pointed forward, or slightly outward to both sides. As you lower down towards the ledge (aiming for your buttocks to make contact with object) raise your arms up. Have your buttocks area touch the ledge of the object and immediately raise back to the starting position, while you simultaneously bring your arms back down by your sides. When rising from the ledge you are driving from your heels and engaging your quadricep muscle.

This counts as one repetition.

Note: If the height is appropriate, this movement can be completed using a chair, bench, couch, and bed.

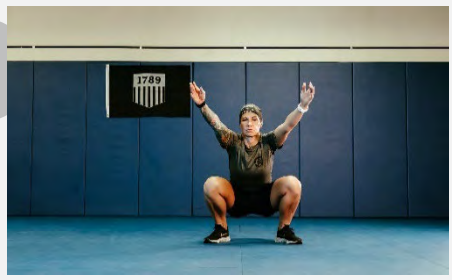
### *Common form issues*

*Bending/leaning forward (chest moving forward) to compensate for having tight hips and lacking flexibility.*

## Program Phase 2: Air Squat/Body Weight Squat (5 seconds)

**Purpose of exercise** This movement engages your entire body and will increase mobility in various areas. To squat properly you need basic hip, ankle, and torso control.

### Calisthenics instructions



Stand with your feet shoulder-width apart with your toes pointed slightly outward. Your arms should be hanging loose by your sides. Engage your core muscles and push your chest out slightly by pulling your shoulder blades towards each other.

Bend your knees and squat down as if you were sitting into a chair of low height. Keep your weight on your heels, keep your core tight and keep your head raised (parallel to the floor). As you lower down into the squat position simultaneously raise your hands upwards. Focus on keeping your torso upright and core tight. Pause.

To come up you are driving from your heels and engaging your quadricep and gluteal region while simultaneously lowering your arms to your side.

This counts as one repetition.

5 second count for this movement: count 1-2 (moving to the low squat position), count 3 (down position) and count 4 and 5 (returning to the start position).

### *Common form issues*

*Due to tight hamstrings people struggle getting parallel or below (due to lacking flexibility). Some people have some sort of muscular imbalance that shows up when doing air squats. People often forget to engage their core while doing this movement.*

*When feet are placed closer than shoulder width apart you will naturally raise on your toes, rather than your heels. This causes undue stress on your knees. This will also result in losing your balance especially when maintaining the low squat position longer than one second.*

*Rounding your back, knees going past your toes, dropping your shoulders or upper body forward are all compensation for lack of flexibility, coordination or strength.*

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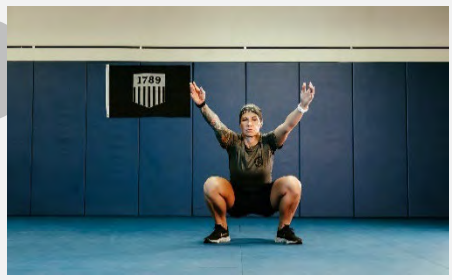
## Program Phase 3: Air Squats/Body Weight Squat (3 seconds)

**Purpose of exercise** This movement engages your entire body and will increase mobility in various areas. To squat properly you need basic hip, ankle, and torso control.

### Calisthenics instructions



Stand with your feet shoulder-width apart with your toes pointed slightly outward. Your arms should be hanging loose by your sides. Engage your core muscles and push out your chest slightly by pulling your shoulder blades towards each other.

Bend your knees and squat down as if you were sitting into a chair of low height. Keep your weight on your heels, keep your core tight and keep your head raised (parallel to the floor). As you lower down into the squat position simultaneously raise your hands upwards. Focus on keeping your torso upright and core tight. Pause.

To come up you are driving from your heels and engaging your quadricep and gluteal region while simultaneously lowering your arms to your side.

This counts as one repetition.

3 second count for this movement: count 1 (moving to the low squat position), count 2 (down position), count 3 (returning to the start position).

### *Common form issues*

*Due to tight hamstrings people struggle getting parallel or below (due to lacking flexibility). Some people have some sort of muscular imbalance that shows up when doing air squats. People often forget to engage their core while doing this movement.*

*When feet are placed closer than shoulder width apart you will naturally raise on your toes, rather than your heels. This causes undue stress on your knees. This will also result in losing your balance especially when maintaining the low squat position longer than one second.*

*Rounding your back, knees going past your toes, dropping your shoulders or upper body forward are all compensation for lack of flexibility, coordination or strength.*

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## Program Phase 1: Squat, step forward

**Purpose of exercise**

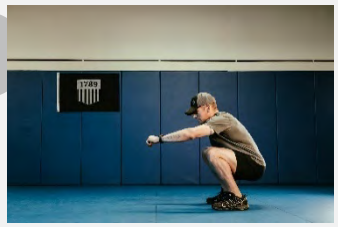
This movement engages your entire body and will increase mobility in various areas. To squat properly you need basic hip, ankle, and torso control. The step forward added in conjunction with the squat will assist in building the muscles without the high impact movement jumping.

**Calisthenics instructions**

1

Stand with your feet shoulder-width apart with your toes pointed slightly outward. Your arms should be hanging loose by your sides. Engage your core muscles and push your chest out slightly by pulling your shoulder blades towards each other.

2



Bend your knees and squat down as if you were about to sit into a chair of low height. Keep your weight on your heels, keep your core tight and keep your head raised (parallel to the floor). As you lower down into the squat position simultaneously raise your hands upwards. Focus on keeping your torso upright and core tight.

3

To come up you are driving from your heels and engaging your quadricep and gluteal region while simultaneously lowering your arms to your side.

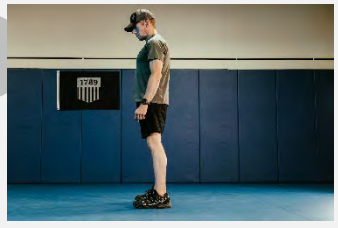
4

Upon completing the squat and when in the standing position, take one step forward with your left leg. Check your positioning prior to squatting. Repeat the squat movement and then step out with your right leg.

Completing both sides (left/right) counts as one repetition.

Reminder: There is no jump in this movement.

5



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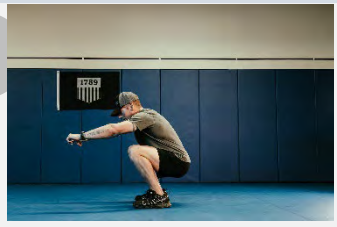

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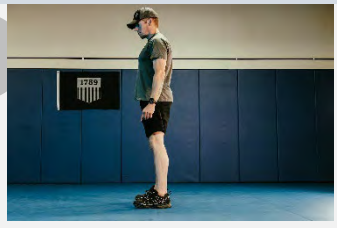

*Common form issues*

*Rounding your back, knees going past your toes, dropping your shoulders or upper body forward are all compensation for lack of flexibility, coordination or strength.*

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## Program Phase 2: Frog Jumps

**Purpose of exercise**

This exercise increases power and speed when performed correctly and consistently. This works your entire lower body and is a heart healthy exercise due to it increasing your heart rate quickly.

**Calisthenics instructions**

1


Stand with your feet shoulder-width apart with your toes pointed slightly outward. Your arms should be hanging loose by your sides. Keeping your core engaged and your shoulders back.

2


Squat down as low as you can without letting your knees go pass your toes, while simultaneously lowering your hands to the floor in between your feet.

3


Jump up and forward while raising your hands above your head, landing softly on your feet. Exhaling as you squat, return immediately into the deep squat position (lowering your hands to the floor).

4


Completing one jump and returning to the starting position is one repetition.

***Common form issues***

*Leaning your chest too far forward for momentum (compensating for limited hip flexibility).*

## Program Phase 3: Squat thrust into Frog Jumps

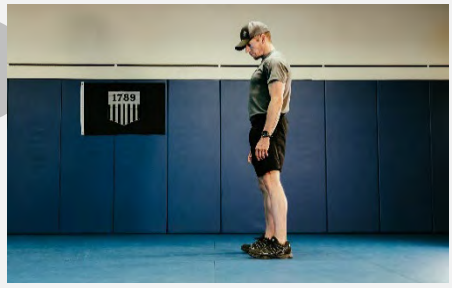
### Purpose of exercise

The squat thrust movement builds explosiveness in the lower body to include quadriceps, hamstrings, and gluteal region. This movement is also good for improving overall hip mobility and cardiovascular endurance.

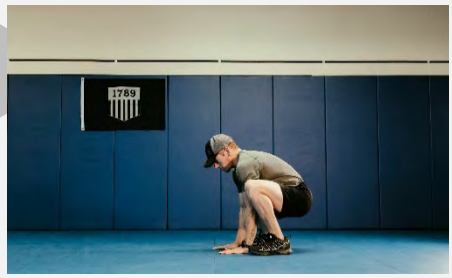
The frog jump exercise increases power and speed when performed consistently. This works your entire lower body and is a heart healthy exercise due to it increasing your heart rate quickly.

### Calisthenics instructions

1



2



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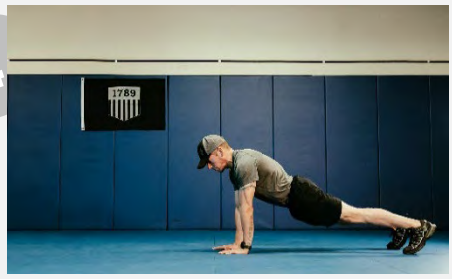

Stand with your feet shoulder-width apart with your toes pointed slightly outward. Your arms should be hanging loose by your sides. Keeping your core engaged and your shoulders back.

Squat down and place your hands on the floor before kicking your legs back to get into the pushup position (feet should land shoulder width apart).

During this movement keep your hands in place on the floor, back flat, and core engaged.

*Continued on the next page*

5

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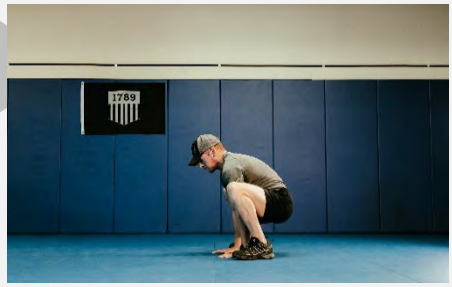

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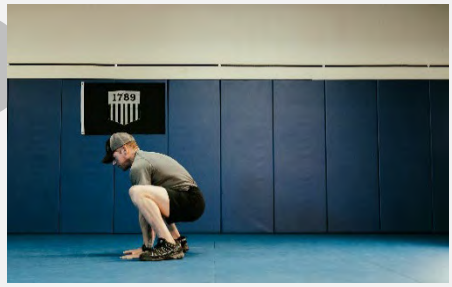


Quickly spring your legs forward to the bottom of a squat position, ensuring your feet are in a wide stance and your toes are turned out at an angle, keeping your hands on the floor.

Jump up and forward while raising your hands above your head, landing softly on your feet. Exhaling as you squat, return immediately into the deep squat position (lowering your hands to the floor).

Completing one jump and returning to the starting position is one repetition.

*Common form issues* *Arching your back due to compensating for tight hips. Leaning your chest too far forward for momentum (compensating for limited hip flexibility).*

## Program Phase 1: Lateral Squat

**Purpose of exercise**

This movement targets your gluteal region, as well as your quadriceps and hip adductors while recruiting your hamstrings and calves.

**Calisthenics instructions**




Start in a standing position with your arms by your sides. Position your feet out sideways so that they are wider than shoulder width apart, having your toes turned out slightly.

Bend at your right knee and push your hips and buttocks back as if about to sit on a chair. While moving into the squat position simultaneously raise your arms up infront of you. Ensure your right knee does not go over your toes.

Keep your feet flat on the floor throughout the movement. Come back to the starting position by raising your right foot back to center line (joining your other foot) while lowering your hands by your side.

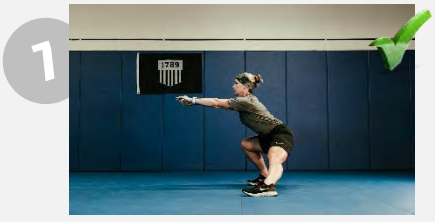
Complete the same movement on the left side.

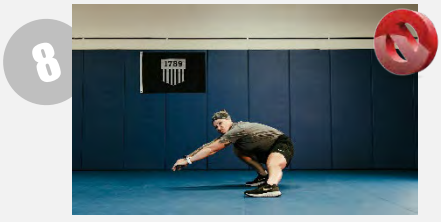
One lateral squat per leg equals one repetition.



*Common form issues*

*Causing additional pressure on your knees if your knee goes over your toes in the squat position. Raising your heels up and being on your toes, due to having limited hip mobility. Bending too far over at your waist, which will appear as your chest leaning towards the floor, rather than staying tall during the movement.*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## Program Phase 2: Skater Jumps

**Purpose of exercise**

A cardiovascular exercise in which you perform a lateral jump to get your heart rate up while strengthening your legs and improving your stability and balance. The strengthening part of this exercise is mostly focused on quadriceps and the gluteal region.

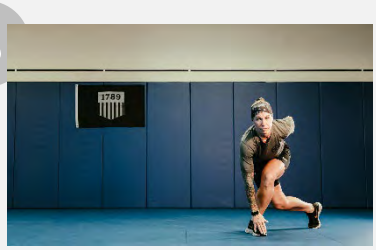
**Calisthenics instructions**

1


2


3


4


5


Prior to completing this exercise, if you have markings on the floor such as tape when in a mat room setting or can follow a straight line on the floor you are recommended to utilize this to measure the distance and ensure you are jumping evenly on both sides.

Stand with your feet about than shoulder width apart with your arms by your sides. Shift your weight onto your left leg, bending your left knee to lower your hips a few inches while raising your right foot off the floor.

Jump laterally to your right by pushing off with your left leg. Land softly on your right leg, allowing your left leg to cross behind you. Your left hand (always the opposite of the foot) slightly touches floor for a brief pause to stabilize your position.

Take note your feet are a few inches apart when the opposing foot lands. If you need to pause to gain your balance prior to jumping, do so.

Repeat the movement, this time pushing off with your right leg and landing on your left leg.

Both sides (right/left) equal one repetition.

*Common form issues*

*Losing balance when trying to touch the floor with the opposite hand due to not having the weight on your heels and leaning too far forward. Knee over the toes due to improper positioning.*

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## Program Phase 3: Skater Jumps into air squat

**Purpose of exercise**

This is a combination of two movements.

The skater jump is a cardiovascular exercise in which you perform a lateral jump to get your heart rate up while strengthening your legs and improving your stability and balance. The strengthening part of this exercise is mostly focused on quadriceps and glutes.

The air squat movement engages your entire body and will increase mobility in various areas. To squat properly you need basic hip, ankle, and torso control.

**Calisthenics instructions**

1

Prior to completing this exercise, if you have markings on the floor such as tape when in a mat room setting or can follow a straight line on the floor you are recommended to utilize this to measure the distance and ensure you are jumping evenly on both sides.

2

Stand with your feet about than shoulder width apart with your arms by your sides. Shift your weight onto your left leg, bending your left knee to lower your hips a few inches while raising your right foot off the floor.

3

Jump laterally to your right by pushing off with your left leg. Land softly on your right leg, allowing your left leg to cross behind you. Your left hand (always the opposite of the foot) slightly touches floor for a brief pause to stabilize your position.

Pick your right foot up and place it shoulder width apart. Complete an air squat.

4

Stand with your feet shoulder-width apart with your toes pointed slightly outward. Your arms should be hanging loose by your sides. Engage your core muscles and push out your chest slightly by pulling your shoulder blades towards each other.

***Continued on the next page***

5

6

Bend your knees and squat down as if you were sitting into a chair of low height. Keep your weight on your heels, keep your core tight and keep your head raised (parallel to the floor). As you lower down into the squat position simultaneously raise your hands upwards. Focus on keeping your torso upright and core tight. Pause.

To come up you are driving from your heels and engaging your quadricep and gluteal region while simultaneously lowering your arms to your side.

3 second count for this movement: count 1 (moving towards the down position), count 2 (down position), count 3 (returning to the start position).

Completing one skater jump and one air squat counts as one repetition.

Upon completion continue to the other side continuing to another skater jump on the opposing side, and one air squat.

*Common form issues*

*Losing balance when trying to touch the floor with the opposite hand due to not having the weight on your heels and leaning too far forward. Knee over the toe due to improper positioning.*

*Due to tight hamstrings people struggle getting parallel or below (due to lacking flexibility). Some people have some sort of muscular imbalance that shows up when doing air squats. People often forget to engage their core while doing this movement.*

*When feet are placed closer than shoulder width apart you will naturally raise on your toes, rather than your heels. This causes undue stress on your knees. This will also result in losing your balance especially when maintaining the low squat position longer than one second.*

*Rounding your back, knees going past your toes, dropping your shoulders or upper body forward are all compensation for lack of flexibility, coordination or strength.*

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# Mobility Movement Guide


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Training Division, National Training Academy

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## Pelvic Tilt into Bridging

### Movement overview

This movement is recommended for strengthening the lumber back and core. Performing this consistently can potentially improve postural imbalances and instability, both of which can contribute to pain in this area.

The pelvic tilt is the orientation of the pelvis in respect to the thigh bones and the rest of the body. For example, you can move the pelvis up (towards the ceiling) or backwards (towards the floor). You can do this from a starting position of not having it engaged (on the floor without contracting any muscles).

The bridging portion of the movement isolates and strengthens your gluteus region and hamstrings (back of your thighs). When performed correctly and consistently this movement can enhance core stability by targeting your abdominal muscles and the muscles of lower back and hip area.

### Movement description

Lie on your back on the floor bending at your knees. Flatten your back against the floor by tightening your abdominal muscles.

Slowly raise your pelvis up towards the ceiling, feeling the areas engage during the movement.

Drive your heels into the floor and tighten your gluteal region. Continue to engage your abdominal muscles as you lift your hips off the floor towards the ceiling.

Hold for up to 15 seconds and slowly lower back to the starting position.

Repeat several times.

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## I, Y, and T Shoulder Stabilization

**Movement overview**

This targets your middle and lower trapezius and infraspinatus. These are the muscles around your shoulders.

**Movement description**

These movements can be performed on top of a surface such as a boxjump, bosu ball, bench, or a firm bed. This will be referred to as the supported position. An alternate position to complete these movements is in a standing position when bending over at the waist, however you will not obtain maximum isolation of the shoulder areas due to positioning. Cycle through each movement until your arms or shouders start to feel fatigued at which point move onto the next portion. It is recommended you complete all three stabilization movements (I, Y, T positions) in this order to maxmize this mobility movement and ensure you are working all areas of your shoulders. Completing one movement of the I, Y and T stabilizations will count as one repetition.

Depending on your current shoulder strength and any prior injuries you may have experienced one of these stabilization positions may be more difficult than the others. This is normal and provides you immediate feedback where you need to focus on monitoring improvement in your strengthening. Keep the FITT principle in mind with all areas of the program, including focusing too much time on one particular area of the body.



<u>"I" stabilization:</u>

<u>Supported position:</u>

Hold your arms behind your body like Superman, a flying arm style. Stretch your arms down the back of your body so that you are in a totally straight line (like the letter "I") and squeeze your shoulder blades together so that your head, neck, and shoulder lift slightly. Hold this position for a few seconds.

Release this position slowly and resume to the starting position.

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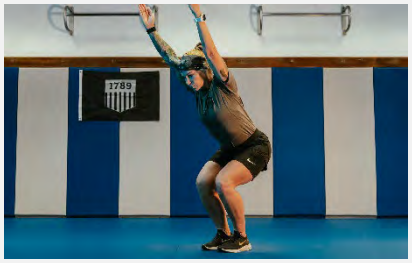

"I" stabilization continued:

Standing position:

Bend at your waist as if you are slightly leaning back into a chair. Raise your hands in a straight line over your head, forming an "I" position keeping your head in the neutral position. Hold this position for a few seconds.

Release this position slowly and resume to the starting position.

Complete the "Y" position next.

"Y" stabilization:

Supported position:

Start with your arms hanging directly below you. Move your arms out to the side of your body so that they make a letter "Y" with your torso. Keep your head in a neutral position. Hold this position for a few seconds.

Release this position slowly and resume to the starting position.

Complete the "T" position next.

Standing position:

Bend at your waist as if you are slightly leaning back into a chair. Begin with your arms hanging directly down about shoulder-width apart. Raise your arms out in front of you at a 45-degree angle, creating a "Y" shape around your head. Keep your head in a neutral position. Hold this position for a few seconds.

Release this position slowly and resume to the starting position.

Complete the "T" position next.

***Continued on the next page***



"T" stabilization:

Supported position:

Start with your arms hanging directly below you. Move your arms out to the side of your body so that they make a letter "T" with your torso. Hold them at shoulder-height, squeezing your shoulders back behind you. Keep your head in a neutral position. Hold this position for a few seconds and focus on squeezing your shoulder blades together.

Release this position slowly and resume to the starting position.

Upon completion this is one repetition of the I, Y, and T shoulder stabilization exercises. Begin again at the "I" position to get more repetitions.

Standing position:

Bend at your waist as if you are slightly leaning back into a chair. Begin with your arms hanging directly down about shoulder-width apart. Raise your arms out into a "T" position keeping your head neutral. Keep your head in a neutral position. Hold this position for a few seconds feeling the stabilization.

Release this position slowly and resume to the starting position.

Upon completion this is one repetition of the I, Y, and T shoulder stabilization exercises. Begin again at the "I" position to get more repetitions.

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## Lateral Lunge into Knee Up Position

### Movement overview

This movement, since lateral in nature is an ideal mobility movement for overall leg harmony and improving your balance. This will help strengthen the gluteus maximus muscle as well as the gluteus medius muscle, which is an important muscle region for the hip joint.

### Movement description

Stand with your feet together with arms by your side, core engaged and looking forward.

Take one lateral wide step towards your right and lunge placing your foot to the side and moving your body weight to the leg. You will naturally bend at the waist during this lateral lunge movement.

Tilt the body slightly and in a controlled motion push the pelvis back into a deep squat so that the thigh is almost parallel to the floor.

Heels remain on the floor during the squat position. If you are on your toes, you are likely overextending such as lunging to wide.

Keep the knees soft and relaxed. Make sure your knee does not go past your toes, putting undue pressure on your knee.

*Continued on the next page*





Go deep into the lunge position and then push off from your right heel and bring your right knee up towards your chest. Grab your right kneecap area and balance yourself on your left foot for 2 seconds.

Place your right foot down.

Transition to the left side by taking a lateral step and completing the lunge on the left side. Go deep into the lunge position and then push off from your left heel and bring your left knee up towards your chest. Grab your left kneecap area and balance yourself on your right foot for 2 seconds.

Place your left foot down.

Upon completion of both sides, this counts as one repetition.

Clarification: One repitition of the movement is shown within the photographs to show the transition is fluid and dynamic rather than a static movement. Take note you do not resume back to a complete static pause during the transition as the first photograph shows. This movement is meant to increase your heart rate while working on mobility in several areas.

*Common form issues with the lateral lunge* — *Knee going over the toes when in the lateral lunge position.*

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# Compensation Movement Guide


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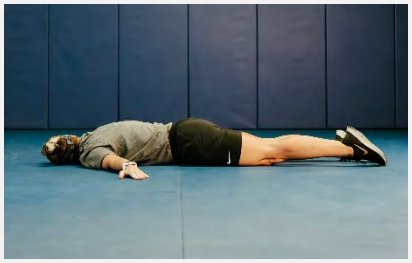
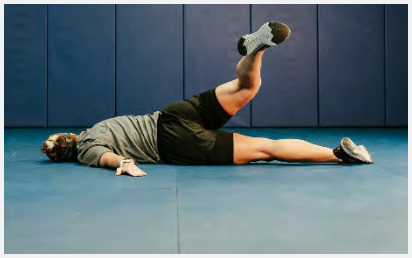
## Scorpion

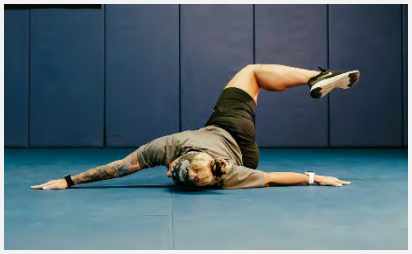
**Movement overview**

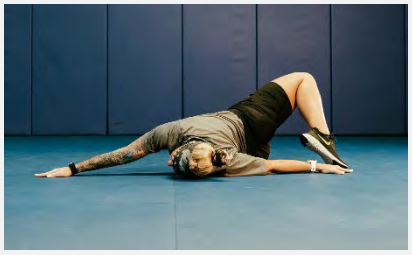
This dynamic exercise improves hip mobility while strengthening the lower back and core area. This exercise also can improve coordination and flexibility throughout the body.

**Movement description**









The starting position is laying down on the floor (flat surface) with your feet together and arms out to the side. Your head is faced the direction of the leg you will be lifting off the floor.

Think of your starting position as a clock, with your head being at the 12 position and your feet at the 6 position. When moving your right foot, the goal is to get your foot towards the 9 position. When moving your left foot, the goal is to get your foot towards the 3 position.

Bending at your knee, lift your left leg off the floor and slowly bring your right foot towards your left hand. Your right hip and right shoulder will naturally rise off the floor during this movement as you are shifting your body weight onto your left hip. The goal is to have your right foot reach and touch the floor near your left hand to obtain the maximum stretch.

Keep both arms and hands touching the floor to ensure the positioning of your midline is maintained. You will feel the stretch in the right hip area.

Pause and hold for a few seconds when you feel the stretch, making sure you feel no pain. Hold your foot in whatever area you can where you feel the stretch. For instance, if you can only get your right foot in the same line as your right hip complete the stretch and monitor your progress over time. The tighter your hips the more difficult this will be, especially on the first repetition.

After a few seconds of holding the stretch, slowly move your right foot back towards your left foot to resume the starting position.

Complete this movement on both sides for a total of one repetition.

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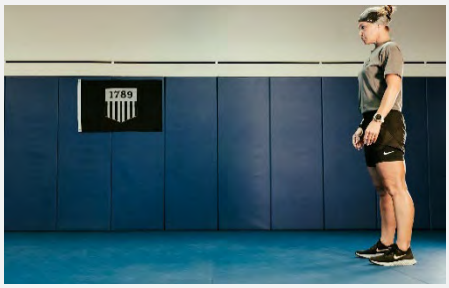
## Walk Outs into Superman Stretch

### Movement overview

This full-body movement targets the abdomen area as well as works on your hamstring flexibility. This also strengthens your lower back area.

### Movement description




Stand tall with your shoulders pulled back and your arms relaxed by your side. Your feet are about shoulder-width apart.

Bend at your hips and place your hands on the floor.

Start as close as possible to your feet, feeling the stretch in your hamstrings.

Using your hands walk out (away from your feet) into the plank position.

The plank position for this exercise is the push-up position, keeping your feet shoulder-width apart.

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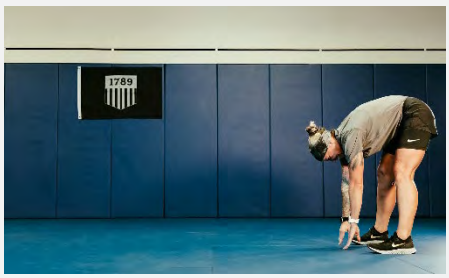
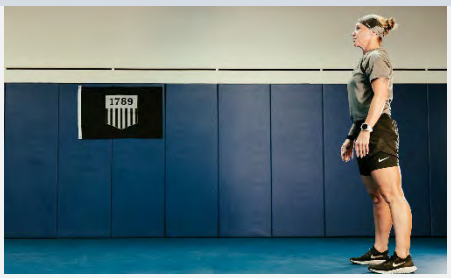

Lay on the floor with your arms extended over your head. Tuck your feet under towards the floor (if you are wearing shoes the laces are facing the floor).

Slowly raise your arms off the floor while simlutenouesly raising your feet off the floor. Keep your head in a neutral position.

Squeeze your glutes, lower back, and shoulders to raise your chest off the floor. The only part of your body that is touching the floor is your core, including your hips. Hold this position for 2-4 seconds and then slowly lower your arms and legs back to the floor at the same time.

Untuck your feet and lower your arms back to the floor while shoulder-width apart.

Raise your body into the plank position.

Using your hands walk them back towards your feet to resume the starting position.  Try to get as close to your feet as possible to feel the hamstring stretch.

Slowly straighten your back and stand tall with your arms by your side.

This completes one repitition.

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# Foam Rolling Guide


## United States Marshals Service

Training Division, National Training Academy

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## Quadricep

**Quadricep description**

Your quadriceps have 4 muscles which can be separated into middle, deep middle, out and inner.

**Movement description**

Assume the prone position with the foam roller. Throughout the movement use your forearms to stay balanced. Lay your quadriceps on top of the foam roller (either at the top of the muscle or the bottom).

You can choose to use the foam roller on your right/left leg one leg at a time, or both at the same time.

If you choose to roll on one leg, ensure to roll on the other leg as well to create equal recovery for both quadricep muscles. It is important to give attention to each leg individually and to all parts of the quadricep. For instance, roll the front of the quadricep but also on the outside area and inside of the quad.

You will change the pressure felt on your quadricep by leaning on your elbows/forearms verse extending your arms. Notice the difference and ensure you breathe throughout the movement.

Pause and roll over any areas that are extra sore or need special attention.

Reminder: there is no preferred starting location when you foam roll your quadricep muscles, whether you start on the upper or lower quadricep muscle. However, it is recommended you develop a routine to make sure you cover your entire quadricep muscle on each leg.

## Iliotibial Band (IT band)

### Iliotibial Band description

The IT band runs along the outside of the thigh area, from just above the hip to just below the knee. It is made up of fascia, an elastic connective tissue found throughout the body. The IT band helps to extend, abduct, and rotate your hip.

### Movement description

Start by having the side of your leg on the foam roller. The foam roller should be positioned just below your hip area. Your top leg can be in line with the bottom let if you want to add some additional pressure.

If you need to unload some pressure and assist your balance you can do the following: bend the top leg and have the knee parallel to the floor. For example, bending the right knee while the foam roller is on your left IT band area.

Make sure you do this movement on both legs. If you feel sore and it is generating from the hip or knee area spend extra time rolling near those areas.

## Hamstring

**Hamstring description**

This area is one of any three posterior thigh muscles in between the hip and the knee (from medial to lateral). The hamstrings are responsible for flexion of the knee and extension of the hip.

**Movement description**

Start with the foam roller positioned towards the top of hamstring muscle. You can foam roll both hamstrings at once as shown or foam roll them one leg at a time (shown below). It is critical you foam roll the entire hamstring muscle area on both legs; however, you choose.

Lift your hips off the ground slightly and move the foam roller down towards the back of your knees.

Balance yourself by having your hands behind you about shoulder-width apart to not place any undue pressure on your shoulders during this movement.

Along the way, if you have any tight spots make sure you make short oscillations in the area.

Appropriately make sure to roll over all aspects of the posterior thigh to hit all areas of your hamstrings.

To foam roll your inner left hamstring, cross over with your opposite leg, bending at your right knee. This adds additional pressure while you foam roll your left inner hamstring. During this movement focus on moving the foam roller where you feel tightness to maximize the release of tension.

Switch legs and complete on the other leg if rolling one leg at a time.

## Gluteal Region

### Gluteal region description

The gluteal region, commonly called glutes are a group of three muscles which makeup the buttocks: the gluteus maximus, gluteus medias and gluteus minimums. The functions of the muscles include extension, abduction, external rotation, and internal rotation of the hip joint.

### Movement description

The preferred starting position is from the top of the glute muscle. This is to ensure when rolling you cover your entire glute area.

Assume a seated position on the foam roller having contact with the foam roller on one leg. Cross over with your opposite leg, bending at the knee. This adds additional pressure on the leg (glute area) you will be foam rolling. Always lean to the same side as the leg that is crossed.

Balance yourself by having your hands behind you, about shoulder-width apart to ensure you are not placing any undue pressure on your shoulders during this movement.

Identify any tight areas and continue to roll on the area.

Complete the same on the other leg/side.

## Calves

### Calves description

The calf muscle, located on the back of the lower leg is made up of three muscles, the gastrocnemius, soleus, and plantaris. The gastrocnemius and soleus muscles unit into one band of tissue, which becomes the Achilles tendon at the low end of the calf.

The calf muscles are responsible for plantar flexion of the foot and ankle. They engage in activities such as running and jumping.

### Movement description

Assume the starting position with the top of your lower leg (below the knee crease) on the foam roller or directly below it.

Lift your hips off the ground slightly and move the foam roller down towards the Achilles tendon area (low calf area).

Along the way if you identify any “tight spots,” continue to roll. It may assist in feeling different areas of your calves being worked if you point your toes down a few times during the movement.

If you need to add more pressure to your calf, simply cross one leg over the other and cross the ankles as well as lift your hips further off the floor/ground.

Complete the same on the other side if you roll one calf at a time.

## Tibia

### Tibia description

This area is commonly referred to as your shin area. The tibialis anterior muscle is the muscle located in the front part of the shin bone of your lower leg. The muscle covers the area just below your knee, down the front of your shin, and finally attaches to the top of your foot.

### Movement description

To foam roll your entire tibia area you want to hit the outer and inner areas. You can do this by focusing on one tibia at a time, or both at the same time. To familiarize yourself with rolling your tibia area it is recommended to roll single leg outer tibia area.

Single leg outer tibia area: Place the roller horizontally on the floor and perpendicular to your leg. Kneel on the foam roller. Place your hands above the roller into a stable position to support your upper body. Place one outer tibia on the foam roller. Roll your body forward as the foam roller rolls along your tibia from the knee to just above the ankle. Slowly glide the roller up and down your tibia. Repeat on the other leg.

Double leg outer tibia area: Place the foam roller vertically aligned with your hips. Place both tibias on the foam roller. Roll your knees forward as the foam roller rolls along your tibia area. Complete this movement from just below the knees to just above the ankles, focusing on any areas that are extra sore. Slowly glide the roller up and down your tibia.

Repeat slowly for up to 90 seconds.

## Thoracic Spine (T-Spine)

### Thoracic Spine description

The thoracic spine is the longest region of the spine, connecting with the cervical spine above and the lumbar spine below. The thoracic spine runs from the base of the neck down to the abdomen. It is the only spinal region attached to the rib cage. Stretching this area can help improve posture.

### Movement description

Start with the foam roller perpendicular to your spine. You have multiple options with regards to where you want to place your arms during this movement.

Options of arm placement include: 1) Arms above your head with your arms straight with palms open, 2) Arms above your head and clasping your hands together, and 3) Crossing your arms across your chest area having your hands near your shoulders.

When performing this movement, you are arching your back over the foam roller which will naturally help keep your neck in a neutral position.

Lift your hips and push your heels into the ground to assist moving your body to ensure you stretch the entire thoracic spine.

If you identify any “tight” spots, drop your hips towards the floor and complete short rolls until the area loosens.

Repeat this movement towards your upper back area as well, the shoulder blade area.

# Tennis Ball Guide


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## Shoulders and Upper Back

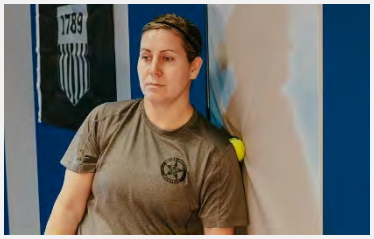
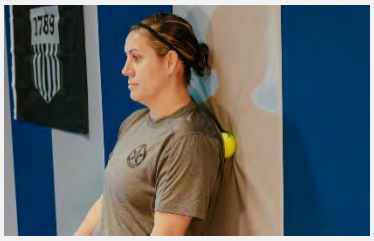
### Shoulder's description

The primary function of the shoulder is to give strength and range of motion to the arm. The most flexible joint in the human body, the shoulder joint is formed by two separate joints. The two joints work together to allow the arm both to move in a large circle and to rotate around its axis at the shoulder. Numerous muscles help stabilize the three joints of the shoulder while giving it motion.

Upper back description:

The functions of the upper back area include maintaining good posture as well as strength, which is needed for pulling and stability movements. The upper back area includes the shoulder blades and where the rib cage connects to the thoracic (chest region) spine.

### Movement description

***The tennis ball should never be placed directly on your spine.**

Stand next to a wall. Place the tennis ball against the wall in the position you will want to feel it on your shoulders and upper back area.

Position the tennis ball on one side of your spine making sure you are never directly on your spine.

Move your body back and forth to assist in moving the tennis ball in different sections of your upper back. Try to work areas in circular motions, especially those that you feel knots or isolated tension.

To apply additional pressure, you can relax your weight into the wall and cross your hands over your chest.

Hold the position for 15-20 seconds in an area that feels sore applying this pressure if it is not causing pain.

Repeat this movement on the other side of your spine.

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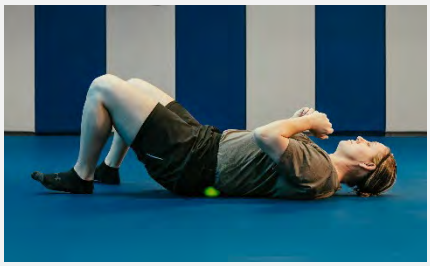
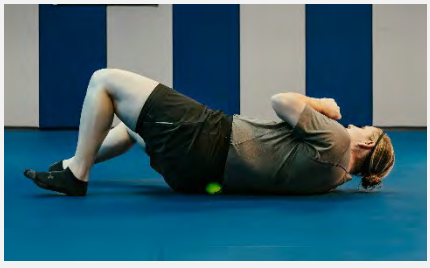
## Middle and Lower Back

### Middle and lower back description

The middle back consists of the thoracic spine. Muscles, tendons, and ligaments provide additional support to the cartilage called discs that act as cushions and provide a range of motion to the back. The lower back, commonly referred to as the lower thoracic area/spine, has the natural inward curve which assists with balancing the weight on your head on top of your spine and reduces the concentration of stress in the lower spine. These areas are more flexible and facilitate side-to-side movements such as movements that require twisting and bending.

### Movement description





***The tennis ball should never be placed directly on your spine.**

Lie on your back on the floor bending at your knees. Place the tennis ball on the left outside edge of your spine, halfway between the mid-to low-back and right on the erector spinae muscles. Your feet, butt, hips, shoulders, and head should all be on the floor or mat. Apply pressure by engaging your core.

By leaning and rotating into the ball (as displayed here) additional pressure will be applied, which will maximize the massage in the area, further releasing tension.

To apply additional pressure to the soft muscle tissue you are working, drop your knee and thigh to the side, down towards the floor. For example, if you feel a knot or tender area on your right lower back area drop your right knee and thigh down to the floor.

Repeat for 30 seconds to two (2) minutes.

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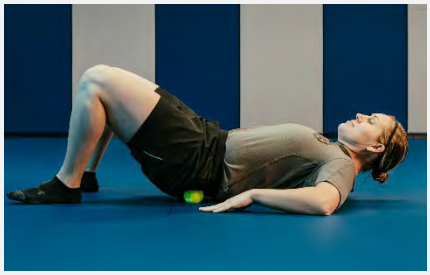
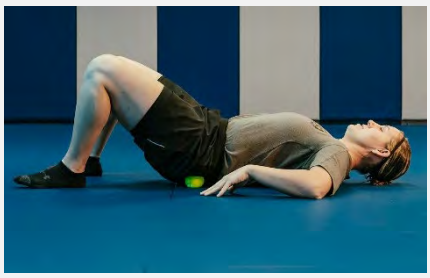
## Gluteal Region

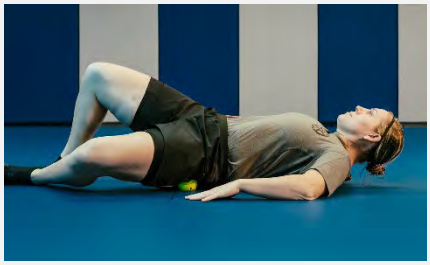
### Gluteal region description

This area supports lower body movement including when you raise your thigh to the side, rotate your leg, or thrust your hips forward. The gluteal complex muscles, commonly referred to as glutes include three muscles which makeup the buttocks: the gluteus maximus, gluteus medias and gluteus minimums. Other muscles in this complex include the tensor fascia latae (TFL) and the deep hip rotators beneath the gluteal region such as the piriformis, obturator externus, and the quadratus femoris. The functions of the muscles include extension, abduction, external rotation, and internal rotation of the hip joint.

### Movement description







Lying on your back place the tennis ball underneath in the gluteal complex area.

Using your hips rotate your body so that the ball is moving in a circular motion in the region.

To add additional pressure to an area that is tight, slowly drop your knee and thigh towards the floor and feel the pressure being added.

You can also stretch this area in a seated position.

Refer to the foam rolling guide, specifically the gluteal region for the movement description.

Repeat for 30 seconds to two (2) minutes on each side.

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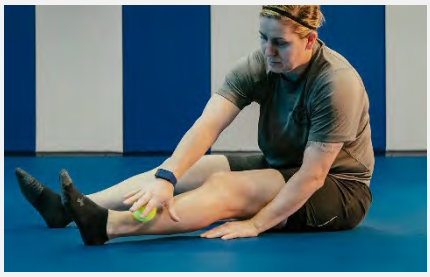
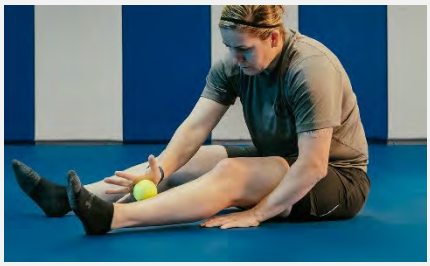
## Tibia

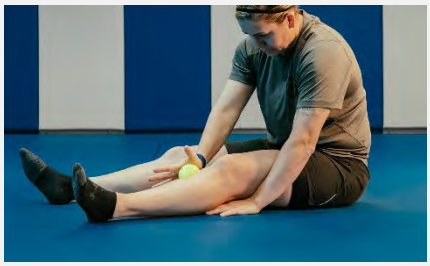
### Tibia area description

This area is the main bone of the lower leg, forming what is commonly referred to as the shin. This is a key weight-bearing structure. The two bones in this area are the tibia and fibula, or calf bone. The primary function of the tibia is to accept and distribute weight across the knee and to the ankle.

### Movement description







In a seated position, apply the tennis ball with one hand to the muscle area just to the outside of your shin bone.

Roll the ball up and down the muscle area applying as much pressure as you'd like along the muscle.

You should feel a massage like pressure along the tibialis anterior muscle.

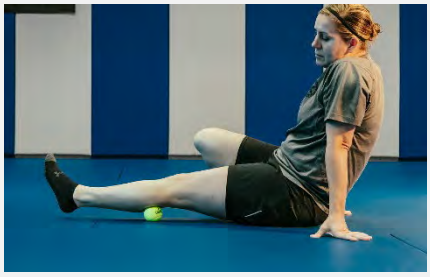
Repeat for 30 seconds to two (2) minutes on each leg.

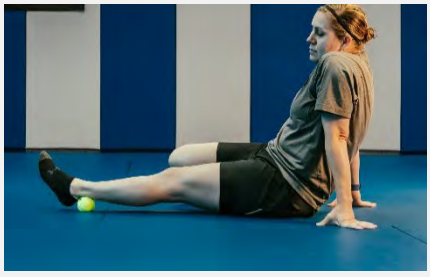
## Calves

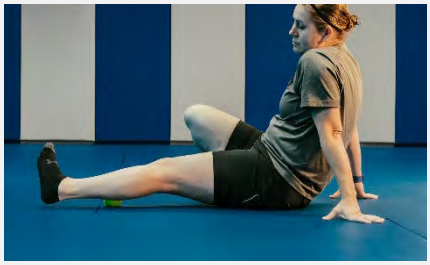
### Calves description

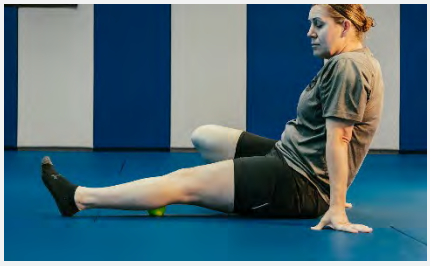
The calf muscle's basic function is to lift the heels up and shift the body weight onto the toes. Calf muscles are powerful and are used to flex the ankle and knee, muscle movements that are required to walk, run, stand, and jump. Tight calf muscles can lead to heel and foot pain due to plantar fasciitis so stretching this area can assist in reducing the likelihood of having this issue.

### Movement description









Place the tennis ball at the bottom of the knee area while your leg is extended.

Roll the ball down towards your ankle/Achilles tendon area.

It is recommended you move the ball right to left and vice versa.

These are difficult areas to reach and release tension, so it is critical you take your time and cover your entire calf area.

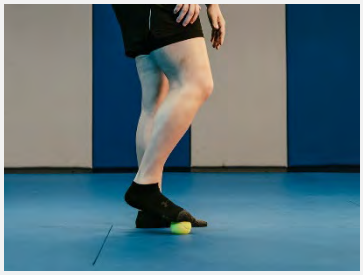
Repeat for 30 seconds to two (2) minutes on each calf.

## Feet

### Feet area description

The feet are the terminal portion of a limb which allows for locomotion and bears weight. The feet balance the entire body weight at different angles and positions, while absorbing the shock while walking. Several common issues associated with tight feet and ankles include plantar fasciitis, IT-Band tightness, and posterior chain weaknesses (calves/hamstrings/glutes).

### Movement description



During this movement you can be standing or seated. It is recommended you do both positions since you will likely feel different areas of the feet being worked and can vary your pressure being applied with how much you lean your weight onto the foot. By trying both positions it will allow you to maximize alleviating tension through different positions.

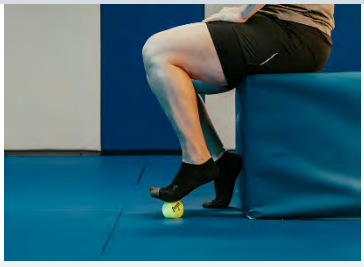
Place the tennis ball under the arch area of your foot and roll it backwards and forwards.

Roll the tennis ball from the heel area to the toe box and vice versa, making sure you cover the area in between in different variations for the entire foot to feel massaged. By completion you should have rolled the tennis ball under your entire foot surface, rather than one line to and from the heel area.

Lean forward, putting weight on the affected side.

Slowly roll the tennis ball back and forth along the arch of the foot.

Repeat for 30 seconds to 60 seconds on each foot.

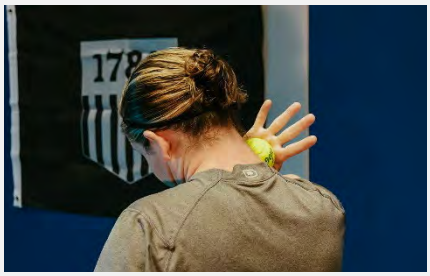


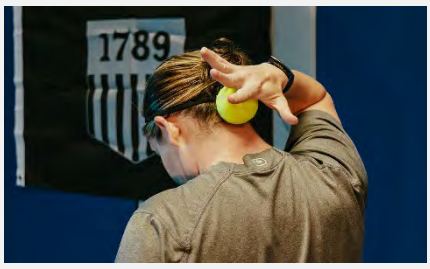
## Neck

### Neck area description

The neck supports the weight of the head and protects the nerves that carry sensory and motor information from the brain down to the rest of the body. The neck is highly flexible and allows the head to turn and flex in all directions. Tightening in the neck such as stiffness and pressure can be a result from things such as posture and stress. Stretching can assist in keeping the neck functioning at its highest level and alleviating tension.

### Movement description





Stand or sit holding the tennis ball and place it on the neck area, not touching the cervical spine area.

Turn your head and self-massage using the tennis ball while using which ever hand feels more natural to use.

Complete circular motions in the area to ensure you are covering the neck area. For example, if you are trying to focus on the right side of the neck, it may be easier to use the tennis ball with your right hand. However, if you are more comfortable using your left hand to massage the right side of your neck it is permitted.

**There is no required way to complete this movement, however it is critical to avoid applying any pressure on the cervical spine.**

It is recommended to rotate your neck in a circular motion after each application of pressure is completed to self-assess your necks range of motion.

Repeat for 30 seconds to two (2) minutes per each side of the neck.