

# ILEA PRE-ACADEMY TRAINING MANUAL

#### DISCLAIMER

To better prepare you to attend the law enforcement academy, the Indiana Law Enforcement Academy is offering a workout plan to help you build the physical fitness necessary to be successful at the academy. Please carefully review the following information before beginning our physical fitness regimen:

# 1. Medical Clearance Recommendation:

Before starting this workout regime, it is strongly recommended that you consult with a licensed physician to ensure you are safe to participate. This is especially important if you have a history of medical concerns, injuries, or any concerns about your overall physical health.

#### 2. Individual Limitations and Modifications:

Everyone's physical fitness level is different. You should not perform any exercises in this workout plan that may put you in physical danger or cause harm to your health. Modify or skip exercises as necessary to suit your abilities and limitations.

# 3. Warning Against Overexertion:

Overexertion can lead to serious injury or health issues. Pay close attention to your body's signals and stop immediately if you experience dizziness, shortness of breath, chest pain, or any unusual discomfort. Seek medical attention if these symptoms persist.

# 4. Proper Technique and Safety:

To minimize the risk of injury, ensure you are using proper form and technique for all exercises included in the workout plan. If you are unsure how to perform an exercise correctly, seek guidance from a certified fitness trainer or healthcare professional.

# 5. Hydration and Nutrition:

Proper hydration and nutrition are essential to support your body during any physical activity. Ensure you drink enough water and consume a balanced diet while engaging in this workout plan.

# 6. Voluntary Participation:

Participation in this workout plan is voluntary and is provided as a tool to help you prepare for the academy. The Indiana Law Enforcement Academy (ILEA) is not responsible for injuries, health issues, or any adverse outcomes arising from your participation in this program.

By choosing to engage in this workout plan, you acknowledge and agree that the Indiana Law Enforcement Academy (ILEA) and its staff are not liable for any injuries, illnesses, or other damage that may result from your participation in this program. This workout plan is provided as a preparatory resource and all participation is at your own risk.

If you have any questions or concerns about this notice, please contact the academy administration before beginning this program.

Congratulations and welcome to the Indiana Law Enforcement Academy! This comprehensive training manual will not only ensure that you are physically prepared to do well on the ILEA entry PT test, but it will develop your body and mind for what is coming over the next 16-weeks of training at the academy.

My goal is to have you be the most well-rounded tactical athlete by the time you show up here at ILEA. The first step is for you to trust the process I have laid out for you over the next 4 to 16 weeks. Some days you will feel great and want to push it, some days you won't feel so hot and need to just go through the motions of getting the work done. I strongly recommend you begin doing movements in this program AS SOON AS POSSIBLE to achieve the success that you desire.

I am beyond thrilled to help you on your journey both prior to coming to the academy, and throughout your time here at ILEA. If you have questions about anything in this manual, please contact me at the email address listed below. Good luck, and I will see you soon!

Cameron Taylor MA, CSCS, TSAC-F

Fitness & Wellness Program Director

Indiana Law Enforcement Academy

Email: <u>cataylor@ilea.in.gov</u>

# STRENGTH & CONDITIONING

The following section contains multiple different circuits to choose from. I understand that not everyone will have access to a gym, and that is why I created the circuits in the fashion that I did. These workouts can be done bodyweight or with minimal equipment that you more than likely have around or outside your house (backpack loaded with books/big rocks from outside/bricks/water jugs/etc.) If time is a constraint that you have then I would recommend picking one of the circuits or conditioning options below and try to get one or all of them in at least 3 to 4 times per week minimum. While this is not a traditional periodized strength & conditioning plan, it will help you build up the necessary physiological qualities needed to be successful on the ILEA PT Test.

# 50 REP Weighted Vest Circuit: Complete each movement in as few sets as possible

50X Vest Swings

Vest Overhead Press (25 reps each arm)

50(Total)X Vest Single Arm Row

50X Sit Up

50X Push Ups

50X Squats

50X Burpee

50(each)X MTN Climber

50(Total)X Reverse Lunge

**NOTES:** 

# **MINI CIRCUITS: BODYWEIGHT ONLY**

# **LOWER BODY**

BW	Sq	uat
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BW Lunge (each) 3x20 reps – Rest 2-3 minutes

BW Lateral Step Up (each)

**BW Squat Jump** 

BW Single Leg Glute Bridge

# **UPPER BODY**

Hand Release Push Up

Sit Up 3x20 reps – Rest 2-3 minutes

Overhead press (Backpack/Vest/5 Gallon Bucket/Rock/etc...)

Side Plank (:30 each side)

Prone I,Y,T

Pull Up **OR** Prone Row

**NOTES:** 

# STRENGTH & CONDITIONING CIRCUITS: Minimal Equipment UPPER BODY

- -Push Ups 5x10-20
  - -add resistance (bands, weights, backpacks)
- Weight Vest/Ruck Bent Over Rows 5x20
  - -Load up a backpack, make it harder by going SLOW on the ECCENTRIC
- -Dips 5x10-20
  - -Use a chair, bench, etc
- -Weight Vest/Ruck Upright Row 5x20
  - -load up your bag and use the top handle, get HEAVY
- -Weight Vest/Ruck Front Delt Raise 5x20
- -Farmer Carry 5x1min (Walk with weight for entire minute-rest for 2min-start next set)
  - -Utilize whatever you can for this (water cans, litters, etc...)
- -Weight Vest/Ruck Tactical Get Up 5x3 each side

# **LOWER BODY**

- Ruck/Weighted Vest Jump Squats 5x5
- -Goblet Squats 5x10
  - -HOLD ANYTHING HEAVY IN THE "GOBLET" POSITION AND SQUAT!
- -Weighted Vest/Ruck Good Mornings 5x10
- -Weighted Walking Lunges 5x10ea
  - -Use Backpack, Bricks, ANYTHING Heavy
- -Single Leg RDLs 5x10e (Bodyweight or hold any weight you can)
- -Bodyweight Lateral Lunges 5x10ea

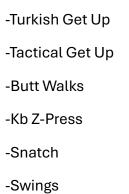
#### **CONDITIONING OPTIONS**

- -Sprints-Find A Hill, Find An Open Field, Aim For 5-10 Sets Of 20-30yd Bouts
- -Run A Mile As Fast As You Can
- -Tabata Burpees (20 Sec Work, 10 Sec Rest) X8 Rounds X2 Complete Cycles
- -30 Minute Weight Vest Walk/Ruck
- -Hold Anything From 10-25lbs Per Hand And Walk 1 Mile Without Setting It Down (If You Set Implement Down Perform 5 Burpees And Then Continue Until You Reach The 1 Mile Mark)

# ADDITIONAL CONSIDERATIONS

# **KETTLEBELL TRAINING**

If you have access to a kettlebell ranging from 12kg/26lbs-16kg/35lbs I would <u>HIGHLY</u> suggest you become proficient in the following movements. You will not only see these movement patterns during PT, but these exercises will also directly transfer over to other skills you will learn here at the academy.



-Windmill

-Halos

-Push Press

-Thruster

# **RECOVERY & WARM-UPS**

#### **DYNAMIC WARM-UP #1**

- -This particular warm-up would be a good one to implement if you have 10-20yds of space to work with either outside, or in an open area in your gym
  - Light jog (50%)
  - Toe sweeps (front leg straight & front toe up)
  - Inchworm + Push up
  - Heel to Hip + Lateral Lunge
  - Forward lunge + Twist (turn toward leg in front)
  - Supermans + Leg Swings
  - High Knees
  - Lateral Shuffle
  - A-Skip
  - Power Skip
  - Build Up Sprint (80%+)

# **DYNAMIC WARM-UP #2**

- -This warm-up will be good if you are in a confined space and do not have much room to work with
  - Tabata style 20s work:10s rest (20:10)
    - Jumping Jacks
    - o SEAL Jacks
    - o Air Squat
    - o Windmill
    - o Reverse Lunge + High Knee
    - o Prone Row
    - o Push Ups
    - o IYT's
    - Plank

# **STRETCHING & RECOVERY**

#### **BAND STRETCHES**

- Straight Leg Hammy stretch (On Back)
- Cross Body Leg Stretch (On Back)
- Outside Leg Stretch (On Back)
- Prone Quad Stretch (On Stomach)
  - SWITCH LEGS AND REPEAT SERIES
  - o HOLD EACH STRETCH FOR: 30s-1min

# **BODYWEIGHT STRETCHES (ON FLOOR)**

- Feet Together Hammy Stretch
- Groin Stretch (similar to first stretch-Feet wide outside hip)
- Half Kneeling Hip Flexor Stretch
- Pigeon Stretch
- Figure 4 Stretch
- Butterfly
- Single Leg Hamstring Stretch
- Floor Pec Stretch
  - o HOLD EACH STRETCH FOR: 30s-1min

# **WALL STRETCHES**

- Pike Stretch
- Split Stretch
- Squat Stretch
- Figure 4 Stretch
- Wall Hip Flexor
- Ankle Reaches
- Wall Chest Stretch
  - HOLD EACH STRETCH FOR :30s-1min

# LACROSSE BALL/FOAM ROLLER PROTOCOLS

# LAX BALL

- o Chest
- Traps/Neck
- Upper Back
- o Mid Back
- o Low Back
- o Glutes
- o Feet
  - Aim to get anywhere between 10-20 Passes with the ball per target area

# FOAM ROLLER

- o Upper Back
- Mid/Low Back
- o Right Glute
- o Right Hammy
- o Right Calf
- o Left Glute
- Left Hammy
- o Left Calf
- o Right Quad
- o Right IT Band
- o Left Quad
- o Left IT Band
  - Aim to get anywhere between 10-20 Passes with the roller per target area

# **NUTRITION**

Table 5.1 Equations for Estimating Total Energy Requirements for Adults

	Equation	
Institute of Medicine		
Men	$EER = 662 - 9.53 \times age in years + PA \times (15.91 \times weight [kg] + 539.6 \times height [m])$	
Women	EER = $354 - 6.91 \times age$ in years + PA $\times$ (9.36 $\times$ weight [kg] + 726 $\times$ height [m])	
Harris-Benedict Equation	on .	
Men	BEE = $66.5 + 13.75 \times \text{weight (kg)} + 5.003 \times \text{height (cm)} - 6.775 \times \text{age}$	
Women	BEE = 655.1 + 9.563 × kg + 1.850 × cm - 4.676 × age	

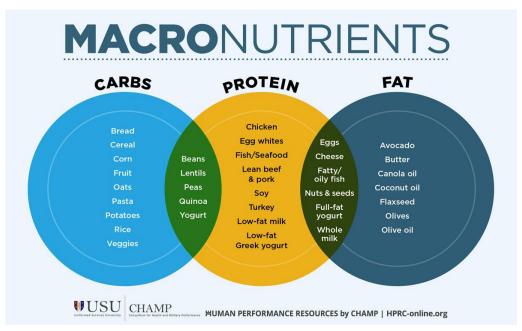
BEE = basal energy expenditure; EER = estimated energy requirement; PA = physical activity factor.

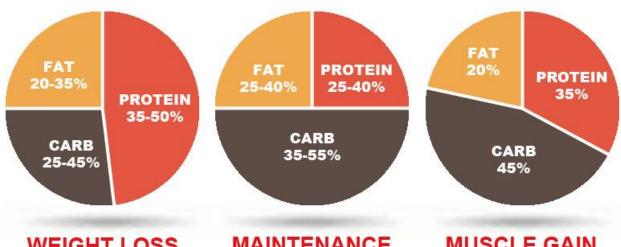
Note: PA was classified into four categories:

- Sedentary—typical daily living activities (e.g., household tasks, walking to the bus). PA = 1.00 for both males and females.
- Low active—typical daily living activities plus 30 to 60 minutes of daily moderate activity (e.g., walking at 5-7 km/h [3-4 mph]). PA = 1.11 for males, 1.12 for females.
- Active—typical daily living activities plus at least 60 minutes of daily moderate activity. PA = 1.25 for males, 1.27 for females.
- Very active—typical daily living activities plus at least 60 minutes of daily moderate activity plus an additional 60 minutes of vigorous
  activity or 120 minutes of moderate activity. PA = 1.48 for males, 1.45 for females.

Reprinted from Cornell University, 2000, Basal energy expenditure: Harris-Benedict equation; D. Frankenfield et al., 2005, "Comparison of predictive equations for resting metabolic rate in healthy nonobese and obese adults: a systematic review," Journal of American Dietetic Association 105(50): 775-789.

The chart above can help you determine your caloric needs for maintenance, as well as your caloric needs based on your daily activity level. Utilizing the math above will take the guess work out of how you are fueling your body!





# **WEIGHT LOSS**

HIGH PROTEIN LOW CARB LOW FAT

# MAINTENANCE

MODERATE PROTEIN. CARB, AND FAT



# **MUSCLE GAIN**

HIGH PROTEIN **HIGH CARB** LOW FAT

# **SLEEP**

# Table 1. Practical Recommendations for Establishing Good Sleep Habits for First Responders

#### **Recommendations:**

Where possible, keep a consistent sleep schedule and establish a consistent bedtime routine.

Avoid going to bed unless sleepy.

Make sure bedroom is quiet, dark, relaxing, and at a comfortable temperature.

Establish a relaxing bedtime routine.

Limit exposure to bright lights in the evenings whenever possible.

Ideally, turn off electronic devices at least 30 min before bedtime. At the very least, adjust settings in electronic devices to reduce screen brightness (dark mode) and use sleep mode/bed mode settings where possible.

Avoid large meals, caffeine, and alcohol before bedtime.

Use your bed only for sleep.

Exercise regularly and maintain a healthy diet.

Reduce fluid intake before bedtime.

If you do not fall asleep after about 20 min, get out of bed and do a quiet activity without a lot of light exposure (avoid electronics).

Information has been adapted from the American Academy of Sleep Medicine (4) and the Centers for Disease Control and Prevention (10)

# Table 2. Practical Recommendations for Nap Taking for First Responders

# **Recommendations:**

Keep naps short (between 10 – 30 min have been recommended).

Set an alarm. This will make sure the first responder can nap for the preferred time period.

If possible, take naps in the early afternoon. Naps after 3:00 pm may interfere with normal sleep cycle (if the first responder has a normal sleep cycle).

Create a restful environment for a nap (quiet, dark place with few distractions).

Eye masks and ear plugs may be useful to create an environment with fewer distractions.

Consuming caffeine immediately before taking a nap could allow for a boost of energy upon waking, as it may take the individual about 30 min to feel the effects of caffeine.

Information has been adapted from the Mayo Clinic (32), National Institute for Occupational Safety and Health (34), and Summer and Singh (39)

https://www.nsca.com/education/articles/tsac-report/sleep-and-first-responders/?srsltid=AfmBOoqn1Jk5UpJKpck3ilXcGaNXMjAE\_JqH09iXqGI3D5Ml6bSrnZBz

# STRENGTH MATTERS FOR LAW ENFORCEMENT



Law enforcement professionals across the globe face physical, mental, and psychological stressors as they perform their tasks. Increasingly, they are turning to strength and conditioning to address rising health care costs, readiness, resilience, and retention needs.

Consider the Evidence-based Benefits of Strength & Conditioning

PERFORMANCE DECREASES

Mental Stress & Cognitive Issues<sup>1</sup>

Cardiac Conditions<sup>2</sup>

Musculoskeletal Injuries<sup>3</sup>

Injuries Resulting from Weight Gain<sup>4</sup>

Increased Injury Risk with the Least Fit<sup>5</sup> PERFORMANCE INCREASES

Strength Training Improves Cognitive Performance

Strength Training Enhances Aerobic Resilience<sup>7</sup>

Strength Training Decreases Lower Back Injury Risk<sup>e</sup>

Strength Training Improves Body Composition

Strength Training Reduces Musculoskeletal Injuries<sup>10</sup>

NSCA.com/Tactical

"Officers stand to profit from an improved ability to perform job functions, reduced stress, and better physical and psychological preparation. Agencies stand to benefit in terms of efficiency as well as fiscally. Officers are less likely to be injured or retire on disability, thus reducing the costs of disability payments and the hiring and training of new employees." Smith and Tooker, Health and Fitness in Law Enforcement

# NSCA Tactical Strength and Conditioning Solutions



# Gold-Standard Strength and Conditioning Certifications

CSCS® - Certified Strength and Conditioning Specialist®

TSAC-F® - Tactical Strength and Conditioning Facilitator®

# 2 Strength and Conditioning Research Journals

The Journal of Strength and Conditioning Research The Strength and Conditioning Journal

The TSAC Report

# Training for Tactical Strength and Conditioning Professionals

NSCA Tactical Annual Training
Tactical Strength and Conditioning
Facilitator Course

# <sup>1</sup>Mental Stress & Cognitive Issues

"In law enforcement populations, job-related stress is related to negative outcomes in physical, emotional, and mental well-being. Exercise and physical activity have been shown to reduce stress levels and improve physical performance in jobrelated tasks"

Quiglay, "Fit for Duty? The Need for Physical Fitness Programs for LawEnforcement Officers".

#### <sup>2</sup>Cardiac Conditions

"Unfit and inactive law enforcement officers have a chance of suffering a heart attack 2.2 times greater than those officers who participate in a physical fitness program. If an officer has a second risk factor, such as smoking, high blood pressure, or high cholesterol, the increased risk rises to 6.6 times."

Anthony J. Pinizzetto and Edward F. Davis, "Offender's Perceptual Shorthand: What Messages Are Law Enforcement Officers Sending to Offenders?" FBI Law Enforcement Bulletin 68, no. 6 (June 1999).

"The risk of having a heart attack doubles with each decade of law enforcement service."

Anthony J. Pinizzotto, Edward F. Davis, and Charles E. Miller II, "In the Line of Fire" (Washington, D.C.: U.S. Department of Justice, Federal Bureau of Investigation, 1997).

#### 3Musculoskeletal Injuries

"Studies have shown repeatedly that physical fitness has a direct impact on reducing injuries and improving personal well-being as well as work performance"

Quiglay, "Fit for Duty? The Need for Physical Fitness Programs for LawEnforcement Officers".

#### 4Injuries Resulting from Weight Gain

"Law enforcement officers are less fit in most areas than more than half of all U.S. citizens despite the fact that the physical demands of their profession require that they be more fit than the average person."

Collingwood, "Why Officers Need to Be Fit".

# <sup>5</sup>Increased Injury Risk with the Least Fit

"The least fit officers account for 80 percent of workplace accidents and compensable injuries. The average cost to a law enforcement agency for an inservice heart attack is between \$400k - \$700k. Heart disease and back problems account for 35 - 85 percent of all early retirements, and lack of physical activity is a major contributor to both conditions. One study tabs the cost of early disability at 165 percent of an officer's salary."

Smith and Tooker, "Health and Fitness in Law Enforcement," 28; Outgley, "Fit for Duty? The Need for Physical Fitness Programs for Law Enforcement Officers".

# Strength Training Improves Cognitive Performance

"Fitness and health programs are believed to increase employee loyalty, improve morale, and decrease turnover. More importantly, employees benefit from improved quality of life and health while reducing employee related accidents, injuries, and illnesses, thus reducing operating costs."

Quiglay, "At far Duty?The Need for Physical Fitness Programs for Law Enforcement Officers".

# 7Strength Training Enhances Aerobic Resilience

"Cardiovascular endurance, anaerobic power, muscular strength, muscular endurance, flexibility, and body composition are all underlying factors in successful inb performance."

Collingwood, "Why Officers Need to Be Rit".

# <sup>8</sup>Strength Training Decreases Lower Back Injury Risk

"Being physically fit translates into fewer sick days, disabilities, and injuries—thereby reducing health-care costs."

Quigley, "Fit for Duty? The Need for Physical Fitness Programs for Law Enforcement Officers".

#### 9Strength Training Improves Body Composition

"Officers that are more fit and active have 40-70 percent less absenteeism than less-fit officers."

Smith and Tooker, "Health and Fitness in Law Enforcement".

# Strength Training Reduces Muskuloskeletol Injuries

"Proper strength and conditioning training has been reported to lead to 25 percent increase in productivity through a variety of factors: reduced absenteeism, reduced turnover rate, reduced accidents, and reduced worker's compensation claims. Research has shown that for every one dollar invested into fitness and wellness programs, the return ranges from two to five dollars."

G. Gregory Tocker and David D. Cashwell, "Revisiting the Fitness and Health in Law Enforcement Model. Program," CALEA Update, no. 96 (February 2008): 23.