ULTIMATE TRAINING FOR THE ULTIMATE WARRIOR

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INTRODUCTION

"If what you did yesterday seems big, you haven't done anything today." – Lou Holtz

Hello and welcome to **Ultimate Training For The Ultimate Warrior**, a resource that details the strength and conditioning requirements of today's combat athlete. Throughout this manual, I will present an intense training system designed to improve functional strength and muscular endurance. This comprehensive training regimen promises both physical and mental challenges. A dedicated effort on your part will harvest improvements directly applicable to the combat arena.

This book has not been written for the frugal fitness enthusiast, but it will serve his needs. The equipment demonstrated throughout this guide is available at little or no cost. You will quickly learn how a low budget system can provide more intensity than the most elaborate and expensive training devices.

It is natural to associate product cost with product value. Marketing specialists recognize this human trait. We often see an expensive product and assume *"if it costs that much, it must be effective…"*

Unfortunately, many products and programs do not live up to their cost.

Luckily, I am not here to sell you a training device or certification program. Instead, I will teach you how an inexpensive sandbag can be converted into the most intense strength and conditioning tool ever created.

At this point, you may presume I am crazy. Perhaps you are correct, but I have no financial interest in any particular training product. I am fed up with the fitness "gurus" who market expensive products as panaceas to strength and conditioning. These individuals deceive aspiring athletes to invest hundreds, if not thousands, of dollars on worthless training equipment.

There are no sandbag certification courses, or "designer sandbags" that will force you to refinance your home. On the contrary, you can create an adjustable sandbag for less than $20. One training session will teach you to never associate product value with product quality. You will soon learn how inexpensive equipment such as a sandbag and sledgehammer can be used to create world-class strength and conditioning routines…

Chapter Overview

Sandbag Training Makes Sense – In this chapter I will explain the logic behind sandbag training. You will learn why competitive fighters should train with sandbags.

Training Principles – All training programs should be designed around an underlying set of principles. In this section, I will review ten important training principles that will form the foundation of your strength and conditioning program.

Constructing Your Sandbag – This section will guide you through the construction of an adjustable sandbag.

Strength Training – Next, I will demonstrate numerous strength training exercises. There are five sub-categories in this section:

- Lower Body
- Upper Body
- Core
- Total Body
- Complex Training

Convenient and Effective – This chapter will teach you how to transform a weighted backpack into an awesome strength training device. You will learn several bodyweight exercises, including a section dedicated to pull-up strength.

Warrior Conditioning – As a fighter, your conditioning program must be intense. This chapter will guide you through one of the most intense conditioning programs ever created. Sub-categories include:

- Non-weighted GPP
- Jump Rope
- Sandbag Running
- Dynamic Conditioning
- Sledgehammer Training
- Wheelbarrow Training
- And more

Warrior Running – This chapter explains the importance of interval running, sprint training, and Fartlek.

Sled Dragging – Next, you will learn how to construct and use an inexpensive sled for conditioning and restoration. Numerous exercises are included, along with sample programs.

Important Advice – This chapter contains important advice for all fighters. I discuss the importance of sparring and skill training.

Training Routines – This chapter contains several complete training routines. You will find routines for strength training, conditioning, core training, and more.

Putting The Pieces Together – In this section I will explain how to construct a complete training program. There are sample schedules provided, along with a discussion of each training element.

Q and A – This section includes answers to common questions regarding the information contained within this training guide.

Templates – Sample training logs have been provided for you to record daily and weekly training schedules.

SANDBAG TRAINING MAKES SENSE

"Opportunities are usually disguised as hard work, so most people don't recognize them." – Ann Landers

The benefits of sandbag training are unique from traditional weight lifting. Sandbags are unpredictable beasts. The sand within your bag will sway back and forth, as you struggle to lift, carry, drag, or throw the bag. The unpredictable nature of the sandbag renders it an invaluable training device.

Consider the craftsmanship involved in constructing a dumbbell, barbell, or kettlebell. These training tools are carefully assembled according to precise measurements. The weight is evenly distributed and carefully balanced to allow for fluent lifting. Many athletes have developed awesome power and strength from these traditional tools of the trade. Unfortunately, the strength developed through conventional lifting is not always applicable to real life combat.
I am not suggesting that you discard your weight set, but I highly advise the addition of a sandbag training routine.

Real life does not share the predictable nature of a carefully constructed barbell. Consider the combative athlete who is engaged in a grueling battle with a quarrelsome adversary. Perhaps he is pinned on the mat, struggling to free himself from an uncooperative opponent. The pinned athlete requires strength, stamina, and skill to wrestle his opponent off and regain control of the bout. The brute strength required for this situation is best developed by lifting awkward, unpredictable objects such as sandbags.

I have never seen a fighter stop in the middle of action to ask his opponent how much weight he can bench press. It does not matter.

Your opponent will never evenly distribute his weight like a barbell. As you wrestle with him, his weight will shift back and forth, as you both vie for position. Sandbag training will develop the brute strength necessary for the unpredictable movements of combat. When you lift the sandbag, it will literally fight with you. The sand will sway back and forth, forcing your stabilizer muscles to work overtime, as you struggle to maintain balance.

The stabilizers help keep the bones and joints secure, while the prime movers extend and flex. The stabilizer muscles help align and maintain joint integrity throughout a normal range of motion, while helping to maintain balance.

Traditional weight training targets the prime movers, with little or no attention to the stabilizer muscles. Many weight-training exercises target one muscle group at a time. When we bench press from a flat bench, we isolate the chest muscles through a controlled range of motion. Many bodybuilders focus on isolation exercise, rather than training with full-body movements. Unfortunately, isolation training has trickled its way into many of today's athletic programs.

What Is Wrong With Isolation Exercise?

Rather than arguing over what is right or wrong, I prefer to focus on the **BEST** way to prepare an athlete for the rigors of competition. Regardless of sport, an athlete will never isolate a single muscle group during competition. Competition requires full-body movements. Champion athletes are not concerned with specific weight lifting numbers. They do not train to impress teammates with bench press records. Instead, these athletes train to maximize strength and power in a manner that is applicable to sport.

Serious athletes have no use for exercise machines that restrict and control movement. Your opponent will never hop on a leg extension machine and ask you to push him. Weight machines are one-dimensional, and often isolate specific muscles. Your routine should emphasize movements that target the entire body, strengthening both the stabilizers and prime movers.

It is important to strengthen the stabilizers to allow your prime movers to perform. When you condition the stabilizers, you increase your ability to generate and apply useful power. Many athletes underestimate and under appreciate the importance of stability.

When you struggle with your opponent, you must generate power from awkward positions. When you lack stability, your body must focus its energy towards the stabilizer muscles, to maintain balance and protect against injury. The body has a built in protection mechanism that operates involuntarily. The stabilizers take priority over prime movers to prevent injury. When your energy is spent attempting to recover stability and maintain balance, there is nothing left for voluntary movement.

What does this mean?

It means that your bench press numbers are worthless when your opponent is squirming around on top of you, trying to pin you to the mat. As you lose balance, your strength is applied to stabilization, which renders your prime movers useless.

By strengthening the stabilizers, you can direct more strength to your prime movers. Your prime movers are those muscles that generate the force necessary to slam your opponent to the ground. When you allow your prime movers to operate freely, you greatly enhance performance. If you want to deliver power from your prime movers, you must first strengthen the stabilizer muscles.

The sandbag will closely mimic the unpredictable movements of an actual opponent. When you train with heavy sandbags, your stabilizer muscles will gradually strengthen and improve. Your prime movers will become free to deliver useful power.

Combat is unpredictable. You will be forced to pivot, duck, jump, lift, feint, dodge, push, and pull. The unpredictable nature of combat cannot be simulated with a carefully constructed barbell or dumbbell.

The Importance of Variety

Many fitness authors recommend certain training products for financial reasons. These individuals disregard the importance of variety, instead preaching the superiority of one particular product or system. For example, if I invented a new training Widget, I would have a financial incentive to market Widget training programs. It would be in my best interest to market the heck out of my Widgets and Widget certification programs. I may even go so far as to discredit other training systems in an attempt to generate interest in my Widgets.

Fortunately, I do not engage in this activity, but there are plenty of well-known "gurus" who preach the superiority of one specific training device over all others. It is unfortunate that certain "professionals" encourage this narrow-minded training approach. I personally train with dumbbells, barbells, bodyweight exercises, medicine balls, sandbags, heavy bags, etc… You name it, and there is a chance I train with it.

Why?

The answer is really quite simple. I believe in the importance of variety. It is important to "attack" the muscles from different angles, with different training devices. You cannot train the same way all the time, and expect continuous improvement. The body is an amazing creation. It is capable of adapting to tremendous physical stress. When you exercise, your body responds to the stress with a reaction. At first, you begin to grow stronger, more powerful muscles. If you continue to train with the same movements, the reaction becomes less and less. This process, known as habituation, is something that we must prevent.

You can prevent habituation by targeting the muscles with an ever-changing assortment of exercises and movements. By incorporating variety, you prevent staleness and the frustration of hitting a "plateau". As an athlete, it is your responsibility to continually improve. We are not in the business of maintenance. Do not waste your time arguing between weight training and bodyweight calisthenics, or kettlebells and dumbbells. Do not choose one training system over all others. Mix it up and incorporate variety. If you train the same way all the time, your improvements will come to a screeching halt.

The sandbag is just one of many training devices that you can use to continue your lifelong quest for strength and power. The sandbag is not a panacea or replacement to all training devices, but it is a worthwhile, inexpensive addition to a complete training program.

What Is Functional Strength?

Earlier I mentioned that sandbag training improves functional strength.

What the hell is functional training?

Great question!

Many trainers speak of functional training, but few understand the true concept. Functional exercise is classified as multi-plane and multi-joint movement. Athletic movement occurs throughout several planes of motion. You run, jump, duck, pivot, and attack from different positions. Competition is random, multidirectional, and unpredictable.

An athlete who isolates individual muscle groups when lifting fails to prepare the body in a functional manner. Functional training prepares the body for real-world challenges. When you train with functional movements, you prepare the body for the rigors endured in competition.

Sandbag training will closely mimic the spontaneity of an actual opponent. The bag is uncooperative. The sand will shift back and forth, as you lift, throw, and drag the bag. The unpredictable nature of the bag is similar to the random, multidirectional nature of athletics.

It is important for combat athletes to train with movements that incorporate strength, balance, explosiveness, core stabilization, and coordination. Do not fight nature by conforming to the controlled movements of a nautilus machine.

The next time you see someone training with a fancy resistance machine, walk over to him, and

drop a 150-pound sandbag on his lap. I am willing to bet that the machine did not prepare him for the inexpensive bag of sand…

Athletes must train with movements that target the entire body, challenge the core, and travel throughout several planes of motion. A functional program trains movements, rather than individual muscles. When you train with functional movements, your strength becomes multi-dimensional. Why limit yourself to one plane of motion when competition is so complex and multifaceted?

Sandbag training will force your body to work as an integrated, functional unit. You will be forced to maintain balance and stabilization, while lifting and moving an uncooperative sandbag. Do not make the mistake of training muscles on an individual basis. Competition does not isolate individual muscles, so do not deceive your body by training this way. Functional training will improve strength, flexibility, core stability, coordination and applicable muscular endurance.

Make better use of your valuable training time by developing real-world functionality. Do not waste your time developing superficial strength that lacks application. Train in a manner that mimics the physical demands experienced during competition.

Train your body to become a functional unit, capable of multi-planar and multidirectional action. If you compete in a combat sport such as boxing, wrestling, or MMA, you will react and attack from an infinite number of positions. Combat is unpredictable, so do not limit your training to machine-guided movements. Train throughout several planes, with explosive, functional movements. Integrate a sandbag into your routine to develop the brute strength necessary for combat.

Train As An Athlete, Not a Bodybuilder

I have nothing against the sport of bodybuilding. Bodybuilders work very hard to achieve their physiques. With this said, it is important to make the distinction between bodybuilding and athletic strength training. Bodybuilders train for "show", athletes must train for function.

Bodybuilders isolate individual muscle groups, spending many hours in the weight room. Bodybuilding is not a skill sport. The bodybuilder is not concerned with perfecting his jab, or improving his defense. As an athlete, your requirements are much different. You must train with the goal of improving performance.

Many coaches confuse weight lifting prowess with athletic ability. Do not make this mistake. Consider the bodybuilder who isolates individual muscle groups

with exercise machines. This individual may possess an impressive physique. His arms will be “pumped” like that of a fitness model.

However, what happens when you tackle this individual to the ground? What happens when you have him pinned on his back as he scrambles to free himself from a chokehold? Do you believe isolation exercise will prepare him for this situation?

The answer is an emphatic NO!

When shit hits the fan during combat, you will require total-body strength and coordination. Your muscles must cooperate and function as an integrated unit. There is no place for isolation training. To prepare for combat, you must train with exercises that stimulate the entire body. Combat demands useful, functional strength.

There is a considerable difference between large arms and functional strength. As an athlete, you will be best served by training with explosive movements that strengthen the entire body. Combat athletes should not isolate individual muscle groups.

An athlete is judged based on how he moves, not how he looks. Looks can be deceiving. A bodybuilder trains with the intention of developing muscle size and symmetry. He does not contend with an opponent who is eager to rip his head off. Your goals are much different. Your training program must revolve around movements. Your goal is to improve function, not form.

By training movements, your strength becomes applicable to specific skills. Strength is useless if you cannot apply it through proper technique. Consider the boxer who boasts of his bench press prowess, but lacks the ability to double up on his jab. Will he be an effective fighter?

Of course not…

Your strength training program must revolve around full-body movements. By training with explosive, functional movements, you will get the “most bang for your buck”. Strength training sessions should not last several hours. You can achieve your strength training objectives in less than one hour, 2-3 days per week.

Two Common Problems

Two common problems exist regarding strength training for combat athletes.

First, there are many old-school trainers, particularly from the sport of boxing, who completely discredit the effectiveness of strength training. These trainers

and coaches cringe at the site of a dumbbell. They have been influenced by myths of the past. Common myths include:

1. Weight training will make you slow
2. Weight training will reduce your range of motion and flexibility
3. Weight training should only be performed with light weights, for high repetitions

Credible strength and conditioning coaches have beaten down and destroyed these myths. A proper strength training program will make the athlete faster, stronger, more agile, and more flexible. Unfortunately, many combat athletes and trainers refuse to accept the advancements in sports training.

Why do so many trainers continue to discredit the effectiveness of strength training?

Ignorance!

Ignorance is a bold word, but it most accurately describes this situation. Many coaches do not understand the principles of strength training. They do not attempt to enhance their knowledge, often refusing to change.

An ambitious coach should engage in a lifelong quest to learn new techniques and principles, with the hope of improving his or her athletes.

When I first entered the boxing gym as a youngster, most coaches believed that weight lifting and bodybuilding were synonymous. The concept of "functional training" was unheard of at the time. The mentality of the gym was that if you lifted weights, you would become slow. These coaches grew up in an era when fighters did not train with weights. Their theory was that if it worked then, it must work now. There was no effort put forth to progress the athletes, despite the advancements realized by individuals from other sports.

Consider the American football players of yesteryear, in comparison to today's athletes. Today's players are bigger, stronger, and faster. Their training programs have advanced by leaps and bounds. Unfortunately, many combat athletes and coaches refuse to learn and apply new training systems.

What is the moral to this story?

In the past 20 years, sports science has advanced exponentially. We now have a better understanding of the body. We understand that a proper strength training program can improve the performance of today's athlete. The focus of this manual is on strength and conditioning movements that can be performed with a heavy sandbag.

These exercises will make you stronger, more explosive, and more functional. This form of training is not a replacement for skill training, but it can AND should serve as a valuable edition to your current training regimen.

On to another common problem…

Let's now discuss another issue that hampers the strength training initiatives of many combat athletes. This problem lies at the opposite end of the spectrum. Rather than discrediting the effectiveness of strength training, many athletes spend **too much time** in the weight room. These athletes become obsessed with weight lifting numbers, losing focus of their true training objective, which is to improve performance.

These individuals spend five or six days per week in the weight room. By focusing so much effort towards weight training, there is little time (or energy) left for skill training and conditioning. Their recipe for athletic success overemphasizes one ingredient (weight training).

It is important to understand that weight training CAN make you faster, it CAN make you stronger, and it CAN make you a more complete athlete. However, just because it CAN, does not mean that it WILL. If used correctly, and incorporated into a complete training program, strength training will benefit all combat athletes. If used incorrectly, it will cause more harm than good.

By focusing too much effort in the weight room, the athlete will have less energy to apply towards skill training, sparring, and conditioning. Strength is useless if you lack the ability to transfer it through proper technique.

Unfortunately, many strength coaches do not understand the complexity of combat sports. They often possess impressive credentials, including advanced college degrees. Many have success with athletes from sports such as basketball and football. They help their athletes get stronger, but fail to appreciate the demanding training regimen of a fighter. It is hard to explain the physical demands of sparring to an individual who has never been inside the ring. A textbook cannot explain the fatigue experienced during combat.

How many people did you grow up with who have competed inside the ring? In high school, how many classmates were training to fight?

Not many…

What about sports such as football, basketball, baseball, and soccer?

I am sure that many of your friends choose these traditional sports over boxing, wrestling, or the martial arts. Many "strength coaches" lack the real world experience to understand the complexities of combat. I do not care what book

you read, or how much football you played in high school, neither will teach you about the physical (and mental) demands of combat athletics.

Conventional strength training does NOT condition an athlete to fight. Strength is just one of many necessary attributes. A strength coach has little to gain by prescribing his athletes to spar, hit the heavy bag, and work on sport-specific conditioning drills. The strength coach gets paid when you are in the weight room pumping iron. Many strength coaches do not realize that boxers, wrestlers, and mixed martial artists have UNIQUE requirements.

Combat sports are unique. This is a fact. Fighters have several objectives that must be addressed in a complete training program. Strength training is just one piece of the puzzle. It should never become a daily activity. Most fighters can fulfill their strength training requirements with 2-3 sessions per week. When a fighter lifts more than 3 days per week, it is probable that their skill training and conditioning will suffer.

How does this information pertain to sandbag training?

The sandbag is convenient, you can train with it anywhere. It is inexpensive, you will not require a fancy gym membership. The sandbag is very difficult to maneuver. It is physically and mentally challenging. Sandbag workouts do not require a lot of time. Sandbag training will improve functional strength and muscular endurance. You will become stronger, while dramatically increasing your ability to sustain intense workloads.

The workouts contained within this book will make you powerful and explosive. They do not require lengthy training sessions. They will not interfere with other training objectives. The sandbag is inexpensive, effective, and convenient. You will not find a more useful training device for less than $20.

You will learn how to dramatically increase functional strength with just a few short, but intense, workouts per week. No more 6-day per week strength training programs. It is not necessary.

Not a Replacement, An Addition

Do not misconstrue my words to believe the sandbag should replace your weight training routine. Free weights are excellent to improve strength. The sandbag is not a replacement to weight training. Rather, the sandbag will fill in the gaps that are missing from traditional strength training.

Never underestimate the importance of variety. Do not focus all of your attention towards one training device. Keep the muscles guessing with different movements. It is important to train hard, but equally important to train smart. Always remain open to new exercises and training techniques. Take the time to

construct your sandbag. Expand your training repertoire to include functional movements. When you train movements, the muscles will take care of themselves.

Not For Everyone

I have provided several reasons why sandbag training makes sense. With this said, sandbag training is definitely not for everyone. Let's weed out those individuals who should NOT be training with a sandbag.

1.) Mr. "How Much Can You Bench"

If you train in a commercial gym, I am sure you have encountered someone who was more concerned with your bench press numbers than he was about the economy, his marriage, and the threat of nuclear war. His sole purpose in life is to determine how much weight you can bench press. A conversation with this nimrod usually begins like this…

Hi, I'm John. Nice to meet you, by the way, how much can you bench?

The next time someone asks you this question, invite him to a training session at your local park. Ask him how many times he can clean and press your 150-pound sandbag. After he passes out in a heap of sweat, kick him in the face (to wake him up), and ask him how far he can run with the 150-pound sandbag held in both arms.

Do not be concerned with "numbers". Worry about improving your overall strength, condition, and performance. We do not lift weights for bragging purposes. We lift with the intention of becoming better athletes. The sandbag will quickly humble Mr. Bench Press. You will not be able to lift anywhere near the amount of weight you are accustomed to with traditional weights.

2.) Mr. Manicure

If you are worried about having pretty hands and fingernails, sandbag training is not for you. You will need to keep your nails short, or the bag will take care of that for you. It is not fun when a 150-pound sandbag rips off a fingernail. Keep them short, and forget about your weekly manicure.

3.) Mr. Step Aerobics

If you are looking for an easy, 10-minute workout to lower your cholesterol and improve your self-confidence, sandbag training is not for you.

> Sandbag training is intense. I have seen athletes who excel at the national level crumble under the weight of a sandbag. Sandbag training will not offer a magical cure or "quick fix" to fitness. The routines in this book will challenge you physically and mentally.

This book is not designed for individuals who make excuses and choose the path of least resistance. You cannot fake your way through a sandbag routine. The exercises and routines in this book will mold you into a powerful machine. Your ability to sustain intense workloads will dramatically improve. You will gain the strength necessary to manhandle your opponents, your boss, or anyone else who deserves an ass kicking…

Get Ready To Feel The Pain!

OK, enough of my rambling. Let's get this party started. At this point, you know that sandbag training will mold you into a functional powerhouse. You also recognize that the training sessions will be extremely intense. You will experience soreness in muscles you never knew existed. You should welcome this challenge with open arms.

Society is plagued by the lazy majority, who constantly search for the "easy" way out. Physical labor has been replaced by automation. Well guess what…

The human body cannot be automated!

If you want to get in shape, you need to bust your ass. There are no 10-minute miracles. There are no magic fat loss pills. There are no ancient secrets that will unlock your power and ability to succeed.

If you want to succeed and improve, you must work for it. The path to the top is a difficult journey. To be the best, you must train the best.

How bad do you want it? Are you willing to work hard to achieve your goals? Are you going to pack your "bags" and quit when you wake up with a little soreness?

I am sick and tired of the lazy majority. It is time to reclaim the throne…

TRAINING PRINCIPLES

"Dictionary is the only place that success comes before work. Hard work is the price we must pay for success. I think you can accomplish anything if you're willing to pay the price."
– Vince Lombardi

Before discussing how to construct your sandbag, and the exercises you can perform with it, let's first review ten important training principles. I encourage you to read this section carefully…

The field of strength and conditioning is one of constant change. There are always new ideas to consider, some prove useful, others a waste of time. Athletes can choose from an infinite number of training modalities. Rather than choosing one training system over another, I prefer an integrated approach that incorporates variety. Below I have listed several training principles, in no particular order, which can be applied to your training program.

I believe in this system. I have experimented with more training systems than I care to remember. I have been in the trenches for many years. Based on personal experience, I now believe and preach the following principles…

I. Knowledge Is Power

There is no such thing as a perfect training system. If there is a perfect system, it will not last long. There are always new ideas and systems worth exploring. Remain open to new ideas, experiment, and ask questions.

Several "fitness cults" exist today. These groups subscribe to one style of training, completely discrediting all others. This narrow-minded approach is counterproductive. Do not limit yourself to one training system.

Malcolm Forbes once said, "The dumbest people I know are those who know it all."

The Stoic philosopher Epictetus once said, "It is impossible for a man to learn what he thinks he already knows."

Continue to research new training methods. Apply your newfound knowledge through action. Never settle, embark on a lifelong quest to improve your training program.

II. Train With Explosive Exercises

Athletes must train with explosive movements to maximize power. Explosive training should be conducted with ground-based activities that integrate multiple joint and muscle group action. Athletic movement often begins with the feet planted on the ground. When you train with ground based movements, your muscles, bones, joints, tendons, and ligaments will all be activated. This form of training will improve coordination in a manner that is specific to athletic performance. You must train fast to be fast. Combat takes place at warp speed. Train specific to your sport. Combat is ballistic and explosive, so prepare accordingly.

III. Train Movements, Not Muscles

Train with full-body movements. Do not isolate individual muscle groups. You will never isolate individual muscles during competition, so do not train this way. By training with movements, you will improve coordination, flexibility, balance, agility, kinesthetic awareness, and functional strength. You will train your body to operate as an integrated, functional unit. Competition takes place in three dimensions, not one. Strengthen the body throughout a complete range of motion.

IV. Become Proficient With Your Bodyweight

All athletes should be proficient with their own bodyweight. I recommend mastery of the following bodyweight exercises:

- One-legged squats
- Handstand pushups
- Pull-ups (all variations)

You will not compete with a weight set strapped to your back, so become dexterous with your bodyweight.

V. Quality Over Quantity

You do not need several hours for each training session. Lengthy training sessions are usually the result of excess rest between exercises, or a lack of training intensity. If you train with REAL intensity, your workouts can be short and highly effective. Many professional athletes divide their day into several short sessions. A perfect example of quality over quantity can be illustrated when comparing the roadwork practices of two boxers. One boxer runs 5 miles each morning at a relaxed pace. He averages 8 minutes per mile. His total roadwork session is 40 minutes in length. Based on the length of his workout, this boxer believes he is training very hard for his bout. Another boxer performs

his roadwork on a 400-meter track. After a brief warm-up, he begins to run 400-meter intervals. He runs each interval at an intense pace. He averages 70 seconds per lap, with 1-minute of rest between each interval. During his rest period, the boxer performs 20 pushups. After approximately 12 minutes, he has performed 120 pushups, and completed 6 intervals. He then concludes with 10 x 100 meter sprints. His total workout lasts 20 minutes, which is half the time of the 40-minute jog. The second boxer's 20-minute workout is far more effective than the long, slow paced 40-minute run.

Always focus on quality, not quantity. This principle applies to strength training, skill training, and conditioning. Train hard, train intense, and train smart.

VI. Plan Ahead Of Time

Plan your workouts ahead of time. Proper planning allows you to accurately target each training objective and requirement. As a combat athlete, you will integrate several training "ingredients" into a recipe for success. Your time will be divided between conditioning, strength training, core training, skill training, sparring, and a variety of other initiatives. Plan ahead so you can allocate your time and energy efficiently.

I recommend a training log to monitor progress. Examples are provided in the final chapter. By planning ahead and maintaining a log, it shows that you are serious about your training.

VII. Continuous Improvement

Training intensity must gradually increase to foster continuous improvement. The body responds to increased overload by growing stronger. Intensity and volume are the two components that control overload. Heavier loads increase intensity. By training longer, you increase volume.

In time, the body adapts to a specific stimulus. To prevent habituation, you must progressively increase the intensity of your training sessions. If overload does not increase, improvements will cease. If overload increases too quickly, injury will occur. For this reason, you must carefully monitor intensity and volume. Train hard, but also train smart.

As an athlete, you must focus on continuous improvement. You must gradually increase the overload applied to the body, while remaining cognizant of the dangers associated with overtraining. World champions are not developed overnight. To become the best, you must be consistent, diligent, and patient. Rome was not built in one day. Your body is no different. Train to improve, not to maintain, but do not rush the process.

VIII. Not Every Day Will Be Your Best Day

Your training program must balance intense training sessions with lighter days and active rest. Not every day will be your most intense day. A *gung ho* approach to fitness can cause overtraining. By incorporating lighter days into your training program, you will ensure proper recovery and muscle growth. Do not neglect the importance of rest and recovery.

IX. Use It Or Lose It

It takes much longer to develop strength and endurance, than it does to lose it. Either you use it, or you lose it. Stay in the gym on a year-round basis. Not every day must be your best day, but there is no reason to schedule extended breaks from training. You work too hard to throw away your improvements by sitting on your ass. Stay in the gym.

X. Intensity

The nine previously listed training principles have been presented in no particular order. Each principle is important.

With this said, I have saved the best for last. Without intensity, nothing else matters. If you train without intensity, you should consider a new hobby such as basket weaving or crossword puzzles.

As an athlete, it is important to challenge yourself while training. You can expect to be challenged physically and mentally during competition. There will be times when you are overwhelmed by fatigue, as your opponent continues to attack.

How will you respond?

You cannot expect to succeed if you have “never been there” before. In order to fight with intensity, you must train with intensity. You must push yourself with the same intensity that your opponent brings to competition.

Training should not always be “fun”. There will be days when you want to quit. The work will seem unbearable. It is during these times that you must dig down deep within and decide how bad you want it. Will you be an action taker or an action faker?

We all want to succeed. You must remind yourself of your desire to succeed while training.

Let me illustrate this message with a true story. A former acquaintance of mine once served as a sparring partner for one of the best middleweight champions in

the history of boxing. This individual, also a professional fighter, was hired to spar with the champion at a 6-week training camp. After one week, the sparring partner packed his bags and returned home.

Upon arriving home, he said, *"If that is what it takes to be a champion, I don't want to be the champion…"*

This individual described the intense training schedule maintained during camp. All sparring partners had to be in bed by 8 PM, to be ready for a morning gym session at 5 AM. The intensity of the camp was too much for the sparring partner to handle.

Not everyone has the physical and mental fortitude to endure such a demanding workout schedule. One reason that I enjoy sandbag training is the sheer challenge that each workout promises.

I am not trying to be a preacher, but I sincerely hope that you push yourself through the workouts in this manual. The work will be difficult, but the rewards will be plentiful. Your strength will increase. Your work threshold will increase. You will develop vice grip like strength in the hands. Your mental fortitude will drastically improve.

One Last Story…

Let me conclude this chapter with a story that sheds light on my thoughts regarding training intensity. I once had an aspiring boxer drive six hours to train with me for the week. He had consulted with me in hopes of improving his overall condition. He lacked strength when fighting against the ropes, and could not maintain his punch output in the later rounds.

After our first day of training, I was disappointed with the man's attitude, work ethic, and most notably his physical condition. He struggled through the drills as if he had never trained before. Despite the poor performance, I gave him the benefit of the doubt. Perhaps he was tired from the long car drive, or perhaps he was just having a bad day…

The following morning we journeyed to a nearby park (my sandbag's home away from home). We began working through a variety of strength and conditioning drills. Ten minutes into the workout, the man began complaining about the difficulty of the work. He argued that the workouts would cause overtraining. He even claimed to have "evidence" based on an article he had read in a muscle magazine. Soon after, I sent the man home. I had no patience to continue training with him. He did not realize that the conditioning requirements of a fighter are different from those of the "average" man.

What would he say if his opponent applied relentless pressure throughout the course of a bout? Would he summon his opponent to stop punching for fear of overtraining? Would he ask his opponent to throw no more than 50 punches per round to prevent delayed onset muscle soreness? Would he ask his opponent to slow down, as his pace was too fast, according to what he read in the latest edition of a muscle magazine?

When a fighter enters the ring, he wants to knock you out. Nothing would make him happier than seeing you hit the canvas. This statement may sound barbaric, but it is the reality of combat sports. Nothing feels as great as landing a clean knockout punch. You will relive the moment inside your head many times over. No other accomplishment in sports can compare to a knockout. There are no teammates inside the ring. Your actions and accomplishments belong to YOU, and no one else.

Obviously, I never wish to injure an opponent, but all concerns are put aside in the heat of battle.

I am not alone with these feelings. This is the reality of combat athletics. This reality should motivate you to push yourself to the limit. You need to raise the bar when training. There will be times when you must push yourself through fatigue. Your muscles will fill with lactic acid. Your mind may tell you to quit. It is during these times that you define yourself as an athlete.

I recognize the reality of overtraining, but I also recognize the importance of intensity. You must train hard, and follow up with proper nutrition, rest, and adequate hydration. You must make the right decisions before, during, and after your workout. You must balance intense training sessions with lighter days to foster recovery.

How bad do you want it? Are you training for recreational fitness, or to become a champion?

I cannot decide for you. You must decide…

Intensity…
Train With It, Or Succumb To It

CONSTRUCTING YOUR SANDBAG

"Luck is the residue of design" – Branch Rickey

Congratulations! You made it through my preaching session. I hope that I have convinced you to construct a sandbag so you may experience the intensity of an ass-kicking workout…

Before we get started, let's review the instructions for proper sandbag construction. Your sandbag will take a beating, so it is important to prepare if for the abuse. It is not fun cleaning up 100 pounds of sand, so take the extra hour to create a proper sandbag.

Equipment List

Sand – I recommend purchasing at least 200 pounds. You can find 50 pound bags of sand at any hardware store. When writing this manual, I purchased 50 pound bags for less than $3 each. You will not find too many 200-pound weight sets for less than $15.

Zip-lock bags – Purchase a few boxes of zip-lock bags (freezer bags). These will serve as mini-sandbags, which allow you to quickly and conveniently adjust the weight. I recommend quart size bags.

Duct tape – You can build or repair anything with a roll of duct tape. Your sandbag is no exception. We will use duct tape to secure our zip-lock bags.

Canvas bag – Your sand will need a home. This home must be able to withstand punishment, sweat, and any other perils you encounter during an intense training session. You can find a nice canvas duffle bag at any military surplus store, or even a local department store.

Backpack – I recommend purchasing a nice, rugged backpack. This smaller bag will be useful for many exercises.

Instructions

1. Fill the zip-lock bags ¾ full with sand. Do not fill the bags 100% or they will feel like mini-rocks. If you keep the bags ¾ full, you will be able to get a better grip on the bags. The sand will be able to swoosh back and forth (as opposed to forming a sedentary rock).

2. Duct tape the ends of the zip-lock bags. Double the bags and duct tape the ends of each bag for added protection. This step may seem cumbersome, but it will protect from future spills.

3. Once you have enough zip-lock bags filled with sand, place them inside your canvas bag.

4. You may wish to tape down any handles on your canvas bag to avoid distraction while performing the exercises.

You can vary the weight of the sandbag by adding or removing the sand-filled zip-lock bags. By taking the extra time to fill the zip-lock bags, you will be able to make convenient, mess free weight adjustments.

As you can see in the illustration, I have used large zip-lock bags. I use quart size bags. You can use smaller bags if you wish to make smaller adjustments in weight.

Take An Hour Out Of Your Day

It is much easier to dump a 50-pound bag of sand into a large plastic bag. I caution you against this shortcut. If you use large garbage bags, it is only a matter of time before you have a serious mess on your hands.

Take an extra hour to fill the zip-lock bags. One hour of your time will save you from cleaning up a huge mess of sand in the future. Even if a zip-lock bag breaks, it will only be a few pounds of sand, as opposed to losing an entire 50-pound bag.

Also, buy an extra box of zip-locks and double up the bags. Duct tape both bags. It will pay off in the end.

Take the time to construct your sandbag properly. Eventually, you may wish to construct a 50, 100, 150, and 200 pound bag.

STRENGTH TRAINING

"The difference between the possible and the impossible lies in a person's determination."
– Tommy Lasorda

When two equally skilled fighters engage in battle, the stronger man (or woman) is often victorious. Strength plays an important role in combat. The sandbag exercises that follow will develop explosive strength throughout the entire body.

If you have never trained with a sandbag before, you can expect to be challenged in a way that you have not experienced with conventional weights. The swaying motion of the sand can be frustrating at times. Do not allow the bag to control you. YOU must control the bag. The bag will not always cooperate, just like an opponent. Do not allow frustration to overtake you. I do not promise any overnight miracles, but with a consistent effort, you will experience tremendous improvements in strength and power.

This chapter is divided into five sections (lower body, upper body, total body, core, and complex training). I will begin with the lower body. It is unfortunate that so many athletes neglect the importance of the legs. They spend countless hours pumping their biceps and posing in front of the mirror. Most commercial gyms are riddled with people who spend more time posing than exercising. The spandex wearing gym members will rarely (if ever) be found working the legs. They are notorious for posing impressive chest muscles, while sporting a pair of pencil legs.

Do not make this mistake. The legs are arguably the most functional muscle group. Football players use their legs to sprint across field. Boxers generate power from the legs when delivering a punch. Martial artists require powerful legs to deliver explosive kicks. Wrestlers use their legs to generate power while

on the mat. Regardless of your training objective, you must not overlook the importance of lower body strength.

Suppose you were shopping for a new home. After searching the classifieds, you locate what appears to be a dream home. You hop in the car, eager to see your future home. Upon arriving, you are fascinated by the architectural design. At first glance, this home appears to be perfect…

As you approach the front door, you notice sand around the base of the home. As the wind picks up, the house begins to sway back and forth. Upon further investigation, you realize that the house has been built atop a foundation made of sand. The builders opted for beach sand, instead of conventional cement. Consequently, the home lacks a secure foundation. It cannot hold up to extreme forces such as windstorms or hurricanes.

This home closely resembles the athlete who neglects to train his legs. At first glance he may appear powerful, but when shit hits the fan, he hits the ground.

LOWER BODY STRENGTH

If you had to choose one lower body exercise over all others, I would recommend the squat. Squats develop strength, power, and muscular endurance. This exercise will increase bone and muscle mass, while strengthening the knee ligaments. During combat, you will commonly react or attack from a squat (or semi squat) position. No machine can replicate the benefits achieved while squatting.

All combat athletes should make time for squatting.

Zercher Squat – Hold the sandbag close to the body, palms facing up. Perform a deep squat. Use a heavy bag for this exercise. Lift the elbows up to increase tension on the upper body.

Back Squat – Clean the sandbag to the shoulders, and lift it behind your head. Squat with the bag across your shoulders. Keep the heels grounded. Do not bend the trunk forward more than 45 degrees.

Hack Squat – Perform a traditional hack squat with the sandbag. Hold the bag behind you and squat until your legs become parallel. This version of the squat will challenge grip strength.

Front Squat – Hold the bag in front of your chest and perform a deep squat. Keep your heels on the floor as you squat down.

Later in this chapter, you will learn how to add a push press to this exercise to create an awesome full body exercise.

Bulgarian Squat – Begin with one leg on the ground, the other elevated from a chair. Perform a one legged squat with the sandbag held against your midsection. This exercise is very challenging with a heavy bag!

Variety!

Earlier I mentioned the importance of variety. As you can see, there are several squat variations. Do not choose one over all others. Each variation provides unique benefits. Mix it up, think outside the box, and incorporate new movements into your routine.

Squat Heavy

Use at <u>least</u> 100 pounds for each squat variation. These exercises will develop awesome lower body strength. Go heavy with your sandbag to crank up the intensity.

Semi Squat Hold – Squat down half way with the sandbag held close to your body. Hold this position for time. You can either hold the bag for one extended period, or perform several repetitions for shorter time periods. For example, you could squat down and hold the bag for 20 seconds. Return to the standing position and repeat for 10 repetitions.

Another option is to hold this semi squat position as long as possible. This movement will challenge you physically and mentally. I do not recommend this exercise on a weekly basis, but it can be used sporadically for a brutal challenge. Strive to improve your time whenever performing this movement.

A third variation is to squat down and hold the bag for 10 seconds before returning to the upright position. Next, perform a full squat, bringing your thighs parallel to the ground. Repeat this sequence ten times, alternating between the squat hold and full squat.

One-legged Squat – To become a complete athlete, you must become proficient with your bodyweight. The one-legged squat is a perfect test of functional strength, balance, coordination, and flexibility. Most athletes cannot perform this exercise on their first attempt. This exercise is much more difficult than it appears. The one-legged squat demonstrates the need for variety. Weighted squatting is excellent, but it does not override the importance of the one-legged squat. This exercise is one that I encourage all athletes (particularly combat athletes) to practice and master. One-legged squats will improve balance, strength, coordination, and flexibility. You do not need fancy equipment, and the results are undeniable.

To perform this exercise, you will lower yourself down on one foot. Your non-working leg will remain straight as you approach the ground. You will need to lean forward slightly to maintain balance. You can hold your arms out to assist with balance. You should pause briefly at the bottom position, before squatting upward on one leg.

As you become proficient with this exercise, you can add weight by holding a dumbbell, kettlebell, or medicine ball. I would not recommend adding weight until you can perform 10 bodyweight repetitions.

If you have difficulty with this exercise, you can learn by first lowering yourself to a stair step, or chair. Lower yourself down on one leg until you are “sitting” on the stair step (or chair). As soon as your butt touches the step, shoot back upwards on one leg. Your movement will be identical to a full one-legged squat, except you will use the stairs to maintain balance on the bottom portion of the movement. Eventually, you will be able to perform full one-legged squats without bottom support.

If you continue to struggle with this exercise, you are likely suffering from problems with balance, coordination, or flexibility (or all of the above). You must be flexible in the legs, particularly the hamstrings to perform this movement. With consistent practice, you will develop the attributes necessary to perform this exercise with fluidity and style. You can practice a few reps each day to gradually develop the strength and balance necessary for this functional

movement. One-legged squats are a perfect supplement to any lower body strength and conditioning program.

Zercher Lunge – Hold the bag close to your body and take a long step forward. Your lead thigh will become parallel to the ground. Do not allow your knee to extend above your foot when lunging forward.

Side Lunge – Take a long step to the side. Your rear leg will remain straight, while your front thigh approaches parallel with the floor. As with all lunges, work both legs evenly.

Lunges are perhaps the most neglected exercise of all. We all recognize the benefits of squatting, but very few athletes take time to include the lunge in their routine. By lunging with a heavy sandbag, you will develop the power to “lunge” towards your opponent. A lunging motion is involved in almost all offensive attacks. Do not neglect this important exercise.

Step-ups – Step-ups are another neglected movement. Grab a heavy sandbag and step up to a raised platform such as a chair. Work both legs evenly. Step-ups will strengthen the calf muscles, hips, and thighs.

Variation – Hold the bag close to your body. This will keep your arms working throughout the movement. You will feel the pain throughout your entire body!

If lunges are the most neglected leg exercise, step-ups are a close second. Very few athletes perform this valuable movement.

Calf Raise – Perform a one or two-legged calf raise while holding the sandbag. Many fighters spend a great deal of time circling the ring on their toes. The calves are very important.

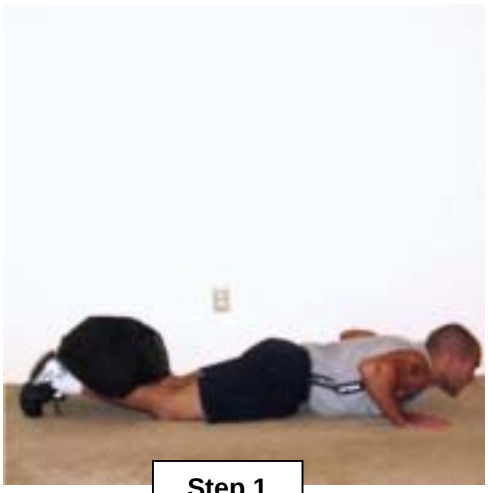

Sitting Calf Raise – Place the sandbag on your legs and perform a calf raise while sitting. You can increase your range of motion by performing the calf raise off a pair of dumbbell handles (as illustrated).


Squat Calf Raise – With the sandbag held close to the body, squat down partially, stopping just before your thighs become parallel to the floor. From this position, perform a calf raise.

The calf muscles are very resilient to exercise. I recommend 3-4 days per week of calf training. These muscles absorb shock and stabilize the ankle and knee during ground-contact movements such as running.


One Legged Butt Raise – Lie with the sandbag across the waist. One leg remains extended, while the other pushes upward from the ground. This exercise is excellent for the hamstrings and glutes.

Two-legged Butt Raise – You can also perform a two-leg variation. Push up with both feet, driving your hips towards the ceiling. The sandbag will serve as added resistance.



Step 1

Glute-Ham Raise – There are machines that facilitate this movement but you can perform this exercise with the help of a heavy sandbag. You will need to secure your feet for this exercise. In the illustration, I have placed a heavy sandbag across my legs. If you have access to a Roman chair, you can perform this exercise by facing backwards. You can also have a partner secure your feet.

Instructions: Start the movement lying flat on the floor with the legs straight. Pull yourself up with flexed hips, hamstrings, and glutes. Focus on pulling yourself up with the legs, minimizing the work done by your arms.

Step 2

Step 3

This exercise is excellent for the hamstrings. Definitely include this movement in your routine.

Glute-Ham Variation With Chair - If you weigh more than 175 pounds, you may have difficulty securing yourself to the ground with a sandbag. Another option is to place a heavy sandbag on a chair. In the illustration, I have secured my feet under an old chair. You can place your sandbag (or a few 45 pound plates) on the chair to keep it in place.

It is common for athletes and strength trainees to neglect their hamstrings and calf muscles. Do not make this mistake.

The Importance of Lower Body Strength

Do not neglect the importance of lower body strength. Your legs play host to the largest, most powerful muscles in your body. The legs carry you from point A to point B. The legs produce the force necessary to explode towards your opponent.

In combat, the legs, hips, trunk, and core generate the power necessary to deliver explosive kicks and punches. Much of your power originates from the lower body. When you punch, the power starts from the ground, as you violently pivot on the balls of your feet. The hips and trunk then take over, as the punch is thrown.

Leg and hip strength is also necessary for kicking. Your power originates from the legs. Powerful kicks require explosive hip action. Exercises such as lunges, step-ups, and squats offer tremendous benefits to combat athletes.

Build your house on a rock solid foundation. Train the legs!

UPPER BODY STRENGTH

Now that we have strengthened the legs, let's turn our attention to the upper body…

Hammer Curls – Curl the sandbag with a hammer curl grip (hands turned sideways). This exercise is much more challenging than a dumbbell or barbell curl.

Sandbag Hammer Curls are excellent for grip strength. As a fighter, it is important to strengthen the hands, forearms, and grip. Strong hands will help you grab and manhandle your opponent. You will also reduce the likelihood of hand injuries while striking. I have broken my hand three times while boxing. It is not fun fighting with a broken hand. Take my advice and strengthen the hands. I only wish I had included these exercises earlier. Since including several grip strengthening exercises into my routine, my hands have never felt better. The sandbag is perhaps the best grip trainer of all.

Sandbag Rows – Grasp the sandbag and pull it up towards your chest. This movement resembles a bent-over row. Maintain a bend in your knees. Do not allow the bag to touch the floor until your set is finished.

Floor Press – Press the bag upward from the chest while lying on the floor. This exercise is much more difficult than it appears. You can also perform a full bench press with the sandbag.

You can also press the bag with bent legs. One of the most difficult parts of this movement is simply getting the bag in position to press. The bag can be quite uncooperative and difficult to balance.

Sandbag Chair Dips – Place a heavy sandbag across your lap and perform a chair dip. Lower yourself as far as possible during each repetition. Elevate your feet from a second chair to increase the difficulty.

Handstand Pushup – This exercise does not involve a sandbag, but is very important. You should become proficient at pressing your bodyweight upward from the handstand position.

This exercise will improve balance, kinesthetic awareness, and functional strength. To perform a handstand pushup, you must first assume the handstand position. Begin by mounting yourself upright against a wall. I recommend holding the upright position of a handstand to become comfortable with "upside down" exercise. It will feel awkward at first.

You can use the wall to assist with balance. With consistent practice, your balance will improve. You will become less dependent on the wall.

You can also increase your range of motion by performing this exercise from chairs or cement blocks. For this advanced variation, you would perform a handstand pushup with your hands elevated from the ground (on blocks or chairs). By elevating the hands, you increase your range of motion. You can also increase the difficulty by looking down towards the floor.

I recommend this exercise several times per week.

CORE STRENGTH

This section will be unlike most core training chapters that you have read in the past. Many of the movements in this section are often categorized as lower body or total-body exercises. I created a separate section for these movements due to the emphasis placed on the muscles of the low back and trunk. I have also included additional (non sandbag) exercises that can be used to create a complete core-training program.

Core training is one of the latest buzzwords in the fitness industry. Unfortunately, many athletes still do not fully understand or appreciate the importance of this vital functional segment. There are many misconceptions regarding the most effective way(s) to train the core.

Core training must target the abdominals, hips, torso, trunk, and low back. The core is the body's center of mass. It is the foundation for the arms and legs. The core provides stability in movement. The core muscles lie deep within the torso. These muscles stabilize the spine and provide the foundation for movement and a solid base of support. Core strength is not measured by an aesthetic set of six-pack abdominals.

Ground-based activities are coordinated at the core. Proper core training programs must strengthen the back, hips, and torso, not just the abdominal wall. Do not evaluate your core program based on whether an exercise causes your abs to "burn". A complete core program will focus on much more than traditional crunches and sit-ups. You must also train the core while standing. Athletic motion takes place on your feet. The strength achieved while lying down does not always transfer to the standing position. Many of the exercises in this section will be performed while standing.

Do not neglect the core. It directly affects your ability to develop force. A powerful core is important for athletic movement. When you punch or kick, you activate the muscles of the core. The abdominals and back work in harmony to control movement of the trunk. The force generated when punching or kicking travels through the core and trunk regions.

Core training is essential for athletic performance and injury prevention. The core allows you to generate powerful movements. A strong torso is required to stabilize the body to efficiently transfer force. If your core is weak, you are weak. You are vulnerable to injury and will never realize true strength potential.

The sandbag is just one of the many tools that you can use to strengthen the core. I encourage you to incorporate these movements into your core program.

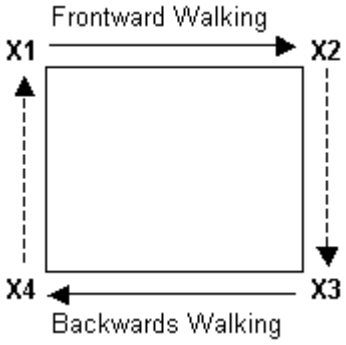
Deadlift – Bend at the knees and deadlift the bag. Pull the bag upward while simultaneously straightening the legs and extending the hips forward. Bend the hips and knees to return the bag to the floor.

Deadlifts are excellent for the back. You will not be able to deadlift anywhere near as much weight with the sandbag as compared to a barbell. Your grip will be challenged during this sandbag version. The sandbag deadlift is one of the most functional exercises that you can perform.

Stiff-Legged Deadlift – The stiff-legged deadlift will work the hamstrings and low back. Keep the knees slightly bent and head up as you lift and lower the bag. Perform this exercise with a smooth, controlled tempo.

Deadlift Walking – Begin with a traditional deadlift. Then take two steps forward before returning the bag to the floor. Deadlift the bag again, and this time take two steps backward to return to the start position.

Another variation involves following the pattern of a square. In the diagram, you will begin at **X1**. You will deadlift the bag at **X1** and take two steps forward to **X2**. You will put the bag down, and deadlift it again at **X2**. You will then walk sideways with the bag to **X3**. I have used dotted lines in the diagram to denote sideways walking. When you reach **X3**, you will put the bag back down. Deadlift it once again and walk backwards to **X4**. You will then deadlift it again, before walking sideways to **X1**.



This very challenging exercise will work your core, legs, and grip. I highly recommend this movement. Use a heavy sandbag for this exercise.

Deadlift Turnaround – Begin by performing a traditional deadlift. From the upright position, you will make a 180-degree turn to your left, so you end in the opposite direction that you started in. Return the bag to the ground. Deadlift it again, this time making a 180-degree turn to your right, so you end in the starting position. Continue this back and forth motion. This exercise is awesome for the core.

Step 1 | Step 2 | Step 3

These deadlift variations are convenient when performed with sandbags. The bags do not require as much horizontal space as a traditional Olympic style barbell. Do not be concerned that you are unable to lift as much weight with the bag. Your grip is a limiting factor, which will get MUCH stronger by performing these movements.

These exercises will give you the functional strength necessary to literally pick someone up from the ground. By incorporating movement such as walking or a turnaround, you will strengthen the core throughout a full range of motion.

If these exercises are new to you, start slow. These exercises are safe when performed correctly. If you go too heavy too soon, you are asking for low back pain and injury. Champions are not created overnight. Slow and steady wins the race, so be patient.

Deadlift Twist – Begin with the sandbag on your side. Grab the bag from your side and deadlift it, while simultaneously twisting to the other side. The bag will travel throughout an arc as you bring it across your body, back to the floor (Step 3). Pause briefly at Step 3 and continue, moving from left to right, and then right to left.

Step 1 Step 2 Step 3

Core Twist – Straddle the sandbag with a firm grip on both sides. Pick the sandbag up from the ground and twist it around as if you were turning a steering wheel. Maintain a bend in the knees throughout this movement. As soon as you have twisted the bag as far as you can to your right (Step 3), repeat the movement in the opposite direction. This exercise will develop awesome core and rotational strength.

Step 1 Step 2 Step 3


Lunge Twist – Hold a sandbag at chest level. Lunge forward, and twist towards your lead leg, bringing the sandbag to your side. This exercise is excellent for the core. Work both sides evenly.

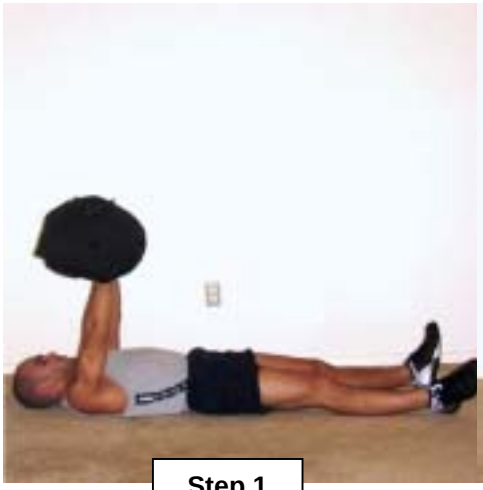

Zercher Good Morning – Grasp the sandbag close to your midsection. Keeping the back straight and knees slightly bent, lean forward. Your torso should become parallel with the floor.


Good Morning – Increase the difficulty of the Zercher Good Morning by holding the sandbag behind the head. This movement is VERY difficult. Start with a LIGHT bag to avoid low back injury.

Sandbag Sit-ups – Lie with legs fully extended. Hold a heavy sandbag over your chest. Perform a sit-up.

Easier said than done. This exercise is very difficult.

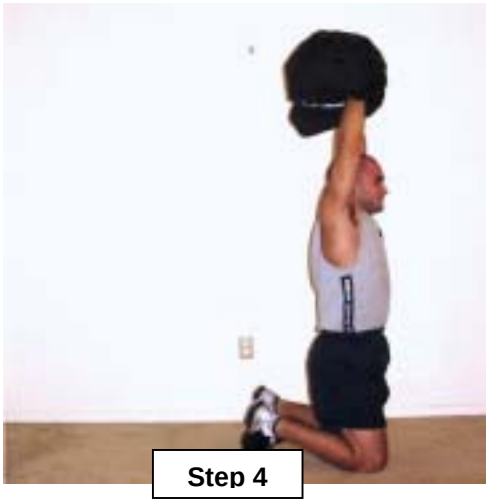
Turkish Get-Up – The sandbag Turkish Get-Up is one of the most difficult exercises you will ever perform. Lie on your back with a sandbag held in extended arms. Your goal is to stand up without bending the arms. You can turn to the side, to get to one knee, and then proceed to stand. This challenging movement can serve as a finisher to any workout. This exercise is commonly performed with a dumbbell or kettlebell. The sandbag version is MUCH more challenging. Start with a light bag.



Step 1

Step 2

Step 3



Step 4

Step 5

Step 6

Additional Core Exercises

I have provided some additional core exercises that I recommend…

Weighted Incline Sit-ups (*not illustrated*)– Secure your feet under the brace of an incline sit-up board. Lie in the supine position while holding a plate or medicine ball against your chest. Perform full range sit-ups, all the way up, and all the way down.

The Wheel – I recommend training with an abdominal wheel. You can purchase a wheel for less than $10. You can begin training this movement from the knees, and progress to a standing rollout.

I believe all athletes should become proficient with one-legged squats, handstand pushups, pull-ups, and standing wheel rollouts. When you can perform 50 rollouts from your knees, you should begin training for standing wheel rollouts. This exercise will strengthen the entire core. I highly recommend it.

You can progress to a standing rollout by first practicing the movement against a wall. Stand facing a wall. Start approximately 5 feet from the wall. Roll the wheel out from the standing position until the wall stops it. Reverse the motion until you are back standing again. You can gradually inch yourself away from the wall, which will increase the difficulty and range of motion. Eventually, you will not need the wall for assistance. You will be able to perform full wheel rollouts as illustrated above.

You can also perform a rollout with a barbell. I recommend using 25-pound plates. Grasp the bar as you would the wheel and roll forward, using the 25-pound plates as your wheels.

Do not rush yourself into a standing rollout. This is an advanced movement. You can receive an excellent workout by rolling from the kneeling position. If you rush into the standing movement without adequate core strength, you may cause excess strain on the low back.

Plank – The Plank is a tremendous exercise to develop the abdominal wall. Start in a pushup position, and then drop your elbows to the ground. Only your forearms and toes should touch the ground. Keep your back straight and hold. It may look easy, but you will change your mind after a few minutes!

One Arm Plank – If the traditional Plank is too easy, try the One Arm Plank. I recommend holding the one arm plank atop a medicine ball. This exercise will challenge the core, while improving balance and coordination.

Most athletes struggle to hold this position for 1-minute.

V-Ups - Start from a lying position with the arms extended behind the head. Contract your abdominals, as you thrust your legs and arms together. Your body will come together like the letter "V". Do not allow your feet to touch the ground between repetitions to maintain tension on the abs.

Chinnies - Bring right elbow to left knee, then left elbow to right knee. Keep a brisk pace throughout this exercise. Do not allow your legs to touch the ground. Your abdominals will remain tensed throughout the entire movement.

Knee Hugs - Start from a lying position with a medicine ball (optional) in hands. Thrust your upper and lower body together until you "hug" your knees. Do not allow your feet to touch the ground between repetitions to maintain tension on the abs. You can also perform this movement **without** weighted resistance.

Russian Twist - Twist from side to side with arms extended. Add resistance by holding a weight or medicine ball. Maintain a semi-crunch position to keep tension on the abs. Keep your eyes **focused on the weight**.

Perform the Russian Twist from an incline to increase difficulty.

Superman – Begin lying face down, with arms and legs fully extended. Lift your arms and legs from the ground so you resemble Superman flying through the air. This is a great exercise for the lower back.

These exercises represent a handful of my favorite core movements.
I highly recommend each of these exercises.

TOTAL BODY STRENGTH

Much of your time should be dedicated to full-body strength exercises. By performing total body movements, you will maximize strength and power development, while training the body to perform as a coordinated, functional unit.

To be fast, you must train fast. Combat is explosive and ballistic. You must replicate the explosive nature of combat while training. Forget about slow motion training, and isolation exercise. Your focus must be on explosive, power movements.

Sandbag Clean and Press – If you had time for only one exercise, you would be wise to choose the Sandbag Clean and Press. This exercise is arguably the most explosive, full-body movement available.

Bend at the knees and clean the sandbag to your shoulders. Catch the bag in a partial squat position as you complete the clean. From this position (Step 2), press the bag overhead before returning to the starting position.

You can also perform Power Cleans with dumbbells, kettlebells, or an Olympic barbell, but I **highly** recommend the sandbag version. This exercise will develop the full-body strength required for combat. The sandbag will become your enemy during this movement. The sand will sway back and forth. Your grip will be challenged. Your entire body will be pushed to the extreme.

You will develop a love – hate relationship with your sandbag, but at the end of the day, you will be a stronger, more explosive athlete. Find time for the Clean and Press!

Step 1 **Step 2** **Step 3**

Power Clean Throws – If you want to develop brutal power, get outside and perform a few sets of Power Clean Throws. This exercise should be performed outside, unless you do not mind throwing 100 pounds of sand against the living room floor.

This exercise starts like a traditional clean and press. Begin by cleaning the bag to your shoulders. Once the bag has been cleaned to the shoulders, you will squat down slightly and explode upward, thrusting the bag directly overhead. Your feet will come off the ground as you explode with an all out effort. There is no deceleration involved with this exercise. Traditional weight lifting requires deceleration at the end of the movement. For example, when you bench press, you must decelerate at the end of the press, unless you are throwing the bar into the air.

There is no deceleration in combat. You punch with the intention of knocking your opponent unconscious. You do not lose momentum when punching. It is important to perform movements that allow you to explode throughout the exercise. Medicine ball training is a great example. You can throw the ball without deceleration. Power Clean Throws are even better due to the increased weight. This exercise will develop the strength necessary to slam your opponent to the ground.

When performing this movement, you must focus on exploding upward. Strive for maximum height with each throw. As soon as the bag lands, clean it again and continue.

This exercise provides another reason to fill your sand into zip-lock bags (double bagged). Your sandbag will smash against the ground after each repetition. Take the time to construct your bag properly, or you can expect to be cleaning up a huge pile of sand.

This exercise will convince you that explosive, full-body movements are far superior to isolation exercise. There is NO comparison, not even close!

Step 1

Step 2

Step 3

Sandbag Shouldering – Straddle the sandbag and bend at the knees. Forcefully swing the bag upwards to the right shoulder. Return the bag to the floor and repeat to the left shoulder.

Continue at a brisk pace, working from left to right.

Shouldering and Squatting – First shoulder the bag and then perform a deep squat (Step 3). Explode upward, returning to the standing position (Stand 4) before returning the bag to the floor (Step 5). Switch shoulders for each repetition. This functional exercise will strengthen the entire body.

Step 1

Step 2

Step 3

Step 4

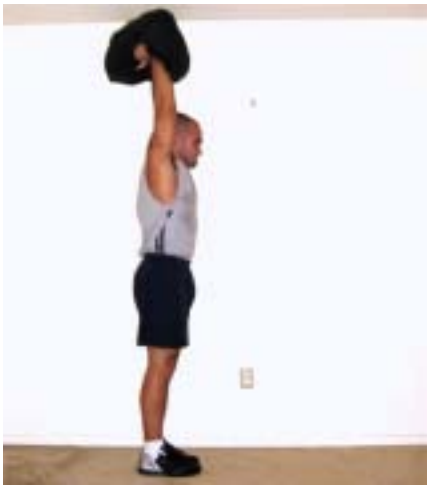
Step 5

Squat Push Press – Begin by performing a Front Squat. From the upright position, you will press the sandbag overhead. Perform this exercise with one continuous motion. You do NOT pause before pressing the bag overhead. Explode to a standing position and continue your momentum by pressing the bag overhead. As soon as you press the bag overhead, repeat the entire sequence. The bag does not touch the ground between repetitions.

Overhead Lunge – For this movement, you will perform a lunge while holding the bag overhead in extended arms. This exercise is extremely difficult. You can perform two variations…

1. Perform a full Clean and Press, and proceed with a left and right leg Overhead Lunge. Return the sandbag to the floor and repeat the entire sequence. For this variation, you will perform a Clean and Press between each pair (left and right leg) of lunges.

2. Another option is to press the bag overhead and continue with a complete set of lunges before returning the bag back to the ground.



The second variation places more emphasis on the legs, as it does not require a Power Clean between each rep.

Both variations are useful, and challenging.

Overhead Squat – Overhead squats with a sandbag are extremely difficult. This exercise will greatly improve balance, flexibility, and strength. You can expect to feel this exercise working the legs and lower back. Begin by pressing the bag overhead. Squat down while holding the bag overhead. I recommend starting with a very light sandbag. I highly recommend the Overhead Squat. If you have never performed Overhead Squats, you may wish to introduce this movement with a barbell, before attempting the sandbag variation.

High Pull – Bend down until the thighs are almost parallel to the floor. Keep the head up and back straight. Pull the bag to shoulder level. Explode on the way up for maximum power development.

Sandbag Snatch and Catch – One of the great benefits of the sandbag is the convenience with which you can perform combination exercises. The bag does not require as much room as a 7 foot Olympic style barbell.

The next exercise involves a snatch, catch, and squat. This exercise is impossible with a barbell. By using a sandbag, you can perform this combination exercise to strengthen the entire body.

To perform the **Sandbag Snatch and Catch** you will begin by explosively snatching the sandbag upward. You will then release your hands from the bag and catch it with your palms facing upward. From this position, you will perform a **Zercher Squat**, before returning the bag to the floor for your next repetition. This exercise involves explosive power and coordination.

Snatch and Catch

In Step 1, you bend down and grab the sandbag. Next, you explosively snatch the bag up towards your face. There is no deceleration with this movement. Snatch the bag as explosively as possible. You then release the bag into the air, and catch it in Step 3. From this position, you perform a complete Zercher Squat (Step 5 – 6). You then bend at the knees and return the bag to the floor (Step 7). Immediately, return to the starting position and continue. Perform this exercise with explosive power from start to finish. This movement will strengthen the entire body.

Variation: Replace the squat with a Zercher Lunge (left and right leg).

Thus far, I have demonstrated all of the exercises without using the handles of the bag. All of the exercises have required grabbing the bag itself, which is very challenging, but excellent for grip strength.

One exercise that you can perform with the handles is the **Sandbag Snatch**. You will need a rugged bag to perform this exercise. Otherwise, you may rip a handle, causing the sandbag to smack you in the face (not fun)…

Step 1 Step 2 Step 3

To perform this movement, you will bend at the knees and grab the handles of your bag. Explode upward as you lift the bag close to your body. Your arms will snatch upward until completely extended overhead.

If you would like to increase the range of motion for this exercise, I recommend using a dumbbell. When using the sandbag, you are unable to snatch from the ground, as the handles extend upward from the floor. With a dumbbell, you can snatch from the ground, to increase range of motion. I highly recommend the dumbbell snatch as a supplement to any sandbag training routine. Below I have illustrated this movement. You can see how I explode upward from the starting position, keeping the dumbbell close to the body as I snatch. You can alternate between left and right arm snatches, or perform sets for each arm (ex. 5 left and 5 right). You can also use a barbell (1 or 2 hands).

Step 1 Step 2 Step 3

Another excellent supplement to a sandbag workout is the **Dumbbell Swing**. This exercise will strengthen the legs, arms, back, and shoulders. You can perform Dumbbell Swings with high repetitions for strength and conditioning benefits.

To perform **Dumbbell Swings**, you will bend down so your thighs are close to parallel with the floor. You will then stand up, as you swing the dumbbell overhead. You can alternate between left and right arm, or perform sets for each arm individually.

The **Dumbbell Swing** is similar to **Sandbag Shouldering**. Both movements develop explosive power throughout the hips.

The Importance of Full-Body Movements

I have illustrated several total body exercises that you can perform with a sandbag. These movements will develop tremendous strength throughout the entire body. Your strength training workouts should include exercises that work the entire body. Combat athletes have many training objectives. You should maximize your power (and time) by focusing on the best movements. Do not concern yourself with isolation exercise.

Combat requires strength throughout the entire body. No muscle group will be left out of the fun. To prepare for combat, you must train with explosive, full-body movements.

COMPLEX TRAINING

Question Break: What would happen if you combined plyometrics with sandbag lifting?

Answer: EXPLOSIVE POWER!

Plyometrics are explosive exercises that enhance starting speed, acceleration, and power. Plyometric exercise involves fast, explosive movements designed to improve power output and neural activation of the muscles. By training the nervous system, plyometrics teach the body to react with speed and power. Plyometric training is not a fad. World-class athletes have successfully used plyometrics for decades.

The benefits of plyometrics are best explained by studying the Stretch-Shortening Cycle (SSC). As a muscle lengthens, it contracts and produces elastic energy. The force applied to the muscle increases. The muscle then contracts concentrically. The muscle shortens and the energy that has been stored dramatically increases the force of the contraction.

During the eccentric contraction, the muscle stores elastic energy. Muscular tension increases. The elastic energy that has been stored is available for powerful, dynamic movements. By stretching the muscle before it contracts, the muscle contracts with greater force. A consistent plyometric training program will increase the efficiency of the stretch-shortening cycle. Plyometrics train the muscles to store more elastic energy, teaching the muscles to develop more power in less time.

Most combat athletes do not include plyometric training in their strength routine. Strength coaches who preach “bodybuilding” style training programs have misguided these athletes. Bodybuilders do not require explosive speed. Combat is fast, and explosive. To be fast, you must train fast.

Unfortunately, many coaches overemphasize weight lifting “numbers”. They are content with adding poundage to their bench press, while failing to generate athletic improvements.

Complex training can serve as a bridge between strength training and sport. Do not limit yourself to a handful of exercises such as the bench press and biceps curl. Your program should be much more comprehensive. A complete program will integrate plyometrics with explosive strength training.

What Is Complex Training?

Complex training integrates strength training, plyometrics, and sport-specific movement. Strength training alone will not maximize speed and power. By integrating plyometrics with strength training, you add the benefit of improving rate of force. Rate of force is the speed with which force is achieved in movement.

As a combat athlete, brute strength is not enough. You must also possess the ability to explode with speed. Complex training is one of the most effective ways to improve power output for combat. Complex training consists of a strength exercise followed by a plyometric movement. For example, you will perform Sandbag Clean and Press (strength) for 8 repetitions, and immediately follow up with 10 Overhand Medicine Ball Throws (plyometric).

Complex training activates the nervous system and fast twitch muscle fibers. You "start the engine" with a strength training exercise, and then "blast off" with the plyometric movement. The strength exercise activates fast twitch muscle fibers (the fibers responsible for explosive power). You conclude the set with a plyometric movement to effectively target these explosive muscle fibers. The plyometric exercise stresses those muscle fibers that have been activated by the strength training movement. During this activated state, the muscles have a tremendous ability to adapt. Complex training works the nervous system and muscle fibers simultaneously. This form of intense training can teach slow twitch fibers to perform like fast twitch fibers.

Complex training is one of the most advanced forms of training. You must prepare the body to accommodate the intensity of these routines. Proper rest between sets is essential to ensure maximum results.

Let's now look at some plyometric movements that you can incorporate into your sandbag training routine…

Plyometric Pushup – Perform a traditional pushup and explode the upper body off the ground. You can add a handclap while in the air to increase the difficultly.

Plyometric Exercises With The Medicine Ball

Chest Pass – Begin with the medicine ball held by your chest. Extend both arms and forcefully propel the ball forward.

Overhand Throw – Begin with the medicine ball behind the head, with arms bent. Throw the ball forward as if you were throwing a soccer ball into play.

Slam – Start with the ball held overhead. Slam the ball to the ground in front of you. Immediately pick the ball up and continue at a fast pace.

Underhand Jump Throw – Begin by squatting with the ball between the legs. Explode off the ground as you throw the ball upward, overhead. As soon as the ball lands, repeat the movement. Continue at a fast pace.

Woodchoppers – Begin by squatting down and touching the ball to the ground. Explode upward into the air, bringing the medicine ball overhead with outstretched arms. Continue this exercise with a brisk pace.

These exercises can supplement a strength training session. You can also integrate various medicine ball exercises into an effective conditioning routine. I have provided several sample routines later in this manual. A brief example of a complex training set would look something like this:

- Sandbag Clean and Press x 6
- Medicine Ball Overhand Throws x 10
- Rest 2-5 minutes before proceeding to next set

This complex set consists of a strength training exercise, immediately followed by a plyometrics movement, and finally a 2-5 minute rest period. This complex set is very intense and effective. After the set is complete, you must allow adequate time for the muscles to recover. Failure to rest between sets will strain the

aerobic system. You should not conduct complex training for its aerobic benefits. Complex training is designed to improve speed and power. You must be fresh for each set. Typical rest periods between complex training routines range from 2 to 5 minutes.

Not For Everyone

Plyometric exercise exerts great force against the musculoskeletal system. It is extremely important that you first develop a solid foundation before attempting these complex training routines. This form of training is not intended for unconditioned trainees. If you start a plyometric program without an adequate strength base, you are asking for injury.

A Discussion on Set and Reps

Moving right along, let's shift gears and discuss one of the most commonly discussed topics…

How many sets and repetitions should I perform?

Does it make sense to train with high repetitions, low repetitions, singles, doubles, triples, quadruples, etc…?

And what about sets? Does it make sense to lift with one set to failure, multiple sets, pyramid sets, etc…?

If I had a nickel for every set and rep scheme that has been created for strength training programs, I would be a rich man.

Rather than choosing one program, I prefer a system of progression and periodization. Do not limit yourself to one system. If your routine lacks variety, you will find yourself stuck in a rut, unable to improve.

Any fitness "guru" who recommends the same rep/set scheme forever should not be designing athletic training programs. There is much more to successful strength training than 3 sets of 10 or 10 sets of 3.

There are several "kinds" of strength. When you train the same way all the time, you restrict your ability to improve as an athlete.

Let's review a few definitions of strength…

Limit strength: Limit strength is the maximum amount of musculoskeletal force that you can generate for one all-out effort. Commonly referred to as your maximum lift, limit strength is enhanced by training with weight that is 80-90% of your maximum, for low repetitions. Some individuals make the mistake of

focusing too much effort towards improving limit strength, without consideration of explosive strength and starting strength.

Starting strength: Starting strength refers to your ability to activate as many muscle fibers as possible. You will activate fast twitch muscle fibers for explosive movements such as punching. Starting strength is best trained with ballistic lifting, using approximately 50-70% of your 1-rep maximum. Plyometrics are also excellent when training starting strength.

Explosive strength: Explosive strength is an extension of starting strength. Once the muscle fibers are activated (starting strength), your ability to keep the muscle fibers "turned on" is dependent on explosive strength. Consider the sprinter who begins a race with tremendous speed. This sprinter exhibits starting strength with his fast takeoff. If the sprinter can maintain his speed, he exhibits explosive strength. This form of strength is best trained with weights approximately 70-80% of your 1-rep maximum, along with plyometrics (complex training) and sprint drills.

As you can see, each form of strength requires a unique repetition and weight scheme.

If you always train with light loads, you will not provide sufficient tension to generate improvements in strength. If you always train with near-maximum loads, you will overemphasize limit strength. Training limit strength to the extreme can actually slow you down.

A proper training program will integrate variety into the repetition scheme. Your routine must target each form of strength.

Do not neglect the importance of variety.

What About Periodization?

Periodized training involves manipulating volume, intensity, and exercise selection over a specific period (training cycle). By manipulating these training variables, you can prevent injury, boredom, and overtraining, while targeting numerous objectives such as anaerobic conditioning and explosive strength development. A common example of periodization includes 4 steps:

1. 3-4 sets of 8-12 reps
2. 3-5 sets of 6-8 reps
3. 3-5 sets of 4-6 reps
4. 3-6 sets of 1-3 reps

Each step is maintained for 3-4 weeks depending on the specific objectives of the athlete.

Another common system involves periodizing a weekly training program. For example, on Monday you would train 8-12 reps, on Wednesday 6-8 reps, and on Saturday 3-5 reps.

In both schedules, the weight increases as the number of repetitions decrease.

What Is the Best System?

It is impossible to label one repetition scheme as the superior system. The best training system is one that incorporates variety. Many athletes associate the term "periodization" with a complex algebraic equation. Do not make this mistake.

Periodization is simply the act of varying your training system to continually meet **your needs**. You should modify some aspect of your workout every 3-8 weeks to prevent staleness. The volume and intensity of your training should reflect your specific goals.

The logic behind periodization is best described with the S.A.I.D. principle. S.A.I.D. stands for Specific Adaptation to Imposed Demands. What does this mean? Your body will respond specifically to the demands imposed upon it. When you repeatedly train the say way, it becomes more difficult to impose a change. By manipulating certain training variables, you encourage continuous improvements.

Do you remember the days when you first began strength training? You made tremendous gains during the first few months of training. Your neuromuscular pathways became much more efficient. You experienced muscle growth almost instantly. Unfortunately, as the months passed by, it became much more difficult to improve…

Why does this happen?

As the body adapts, it becomes accustomed to the training regimen that you perform on a weekly, monthly, and yearly basis. I know athletes who have been training with the exact repetition system for years. I am sure you know someone who has trained with the customary "3 sets of 10" their entire life.

Guess what?

They have trained for years with minimal improvements.

When the body adapts to a particular style of training, you must incorporate variety. Keep the muscles guessing to continue the response. Add another dimension to your training. Target the muscles from different angles, with different movements.

As mentioned, there are several forms of strength. It is impossible to maximize speed strength, explosive strength, limit strength, and anaerobic strength with one style of training.

Another factor to consider is the intensity of your routine. Earlier I discussed complex training. This form of training is extremely intense. Due to the intense nature of complex training, you should cycle these routines into a year-round program.

Do The Myths Continue?

There have always been myths regarding the benefits of strength training for combat athletes. Unfortunately, as many myths were exposed, new fallacies appeared. Initially, fighters were instructed to train with light weights, for high repetitions.

Eventually, this myth was exposed.

Recently, new myths have appeared regarding a fighter's strength program. The latest "breakthrough" states that fighters should only lift extremely heavy loads for low repetitions.

We jumped from lift light for several reps, to lift heavy for low reps.

I agree that heavy lifting has its place in a fighter's strength training program, but it should not become the sole form of weight training.

Still not convinced? Consider the following analogy…

Many of today's elite athletes follow periodized strength training programs. For many years, athletes from the National Football League (NFL), Major League Baseball (MLB), the National Basketball Association (NBA), and the National Hockey League (NHL) have reaped the benefits of periodization.

These athletes work for organizations that invest millions of dollars each year to ensure their success. Professional athletes are fortunate to train with the most knowledgeable coaches and trainers in the world.

Why do these trainers continue to preach a system of variety and periodization?

Because it works!

Yet, for some reason, many "self-appointed" fitness gurus instruct you to lift the same way all the time. I have heard comments such as "a combat athlete should never train with more than 5 repetitions per exercise…"

Why would a fighter follow such a one-dimensional approach to strength training? Is combat one-dimensional?

NO!

Combat is perhaps the most multi-dimensional event of all. The athlete requires a mix of limit strength, starting strength, explosive strength, anaerobic strength, agility, balance, coordination, and flexibility (just to name a few).

How can one training program encompass the requirements of such a multi-dimensional event?

Impossible!

You must incorporate variety if you wish to maximize performance. Football players require explosive strength. Do you think their explosive strength is "different" from the explosive strength of a boxer?

Sport-specific strength training is largely a misconception. If a football player wants to improve starting strength, he will train with weights that are approximately 50-70% of his 1-rep max. He will also include various plyometric drills, and eventually progress to complex training.

Why does he train this way?

Simple answer, this is the BEST way to improve starting strength.

Why should a boxer train with a different system when he wishes to improve starting strength? There is no reason.

The wheel has already been invented. It should not be reinvented for combat athletes. Sport-specific training is more applicable to conditioning and skill training objectives. For example, a boxer must train to throw hard punches for several 3-minute rounds. The boxer must pattern his conditioning routine around anaerobic threshold training that mimics the work- to-rest ratios experienced during competition. A marathon runner on the other hand, will focus his conditioning program towards extended aerobic sessions (i.e. distance running).

Sandbag lifting is more "sport-specific" to combat because of its awkward nature. The sand moves back and forth as you lift. Sandbags challenge grip, stabilizer strength, balance, and coordination. These elements make sandbag training sport-specific. The sandbag is NOT sport-specific because of the number of repetitions that you perform. The definition of strength is not new. Coaches have been designing programs that target various forms of strength for many years. It is about time that the combat sporting world began to take notice.

Follow a system of progression and periodization. Do not be intimidated by science. Understand that you must vary the intensity of your weight training sessions over time by altering exercise selection, number of repetitions, amount of weight, the use of plyometrics, and the rest period between sets. Each element can AND should be adjusted throughout a training cycle. You cannot follow one weight-training program forever and expect continuous improvements.

As a combat athlete, you must train with intensity. There is no exception to this rule. A well-planned program will allow you to direct this intensity in multiple directions, thus allowing for continuous improvement. You should not charge full throttle in one direction forever. By periodizing your routine, you constantly manipulate training variables to foster optimum improvements.

What Does This Have To Do With Sandbag Training?

Just because we are lifting sandbags, does not mean that we should turn our backs on science. I realize that sandbags are not as "scientific" as a fancy nautilus machine, but this is no excuse to overlook the importance of variety and periodization.

I have listed a sample periodization schedule below that I have used with many fighters. This schedule has withstood the test of time, helping many fighters improve explosive power and speed for fight night.

Sample Periodization Schedule

Phase 1 (Weeks 1-3)

This introductory phase will focus on the following:

- Improve general strength throughout major muscle groups
- Increase muscle mass relative to body weight
- Work to overcome weaknesses
- Reduce body fat

In this introductory cycle, focus on lifting 50-65% of your maximum lift.

Experienced athletes with prior strength training experience often bypass this phase (or increase the weight by 10% of their one-rep max).

Phase 2 (Weeks 4-6)

Moving into the 2nd phase, you will have established a solid foundation to build from.

This phase will focus on the following:

- Improve limit strength in major muscle groups
- Begin training starting-strength
- Begin anaerobic threshold training

During this training cycle, we split our training intensity between two weekly workouts. For example, on Day 1, the focus is on lifting heavy weights to improve overall limit strength. To achieve this objective, we lift close to 80% of our maximum for approximately 6 repetitions.

On Day 2, our focus shifts towards speed and anaerobic strength training. We lift weights between 55-70% of our maximum.

Phase 3 (Weeks 7-9)

The third phase will add to the explosive training introduced in weeks 4-6. You will focus on the following:

- Maximize explosive strength
- Intense plyometrics and medicine ball drills
- Continue anaerobic threshold training

During this phase, we will focus on maximizing explosiveness by lifting weights that are 70-80% of our maximum for 6-10 repetitions. We will incorporate plyometrics into the strength workouts to create a complex training routine.

Phase 4 (Weeks 10-12)

- Maximize anaerobic conditioning
- Maximize ballistic training with complex training
- Heavy weight training is phased out in place of speed training

This cycle ends by tapering out heavy weight training. Our focus will shift towards anaerobic strength.

Important Note

During the final stages of fight preparation, it is important to phase out heavy weight training and plyometrics 14 to 21 days before competition.

Do not leave your power in the gym. Bring it to the ring. During the phase out period, you can perform maintenance sessions with bodyweight style exercise such as pushups, one-legged squats, and handstand pushups.

Simplified Approach

Ok, so the thought of planning a 12-week training program does not float your boat. Are their other alternatives?

Yes!

You can periodize your training program throughout the week. For example, you can focus on starting strength on one day, and limit strength another.

Day 1 = 3 sets of 8-10 reps at 55-75% of 1-rep max
Day 2 = 5 sets of 4-7 reps at 80-90% of 1-rep max

You can incorporate plyometric exercise on separate days, or as part of your strength program to create a complex training program.

Another approach involves adjusting your routine every 3-4 weeks.

For example, start with a weight that allows for 8-12 repetitions. Focus on moving the weight fast, in a ballistic manner. After a few weeks, increase the weight of your sandbag and begin to train 4-7 repetitions per set. By increasing the weight, you will shift your emphasis towards explosive power and limit strength. Depending on your goals, you can progress to heavier loads (2-5 reps), or return back to the first cycle (8-12 reps).

During each phase, you must train with intensity. Just because you are training 8 repetitions does not mean the weight should not pose a challenge. You are simply redirecting your intensity towards different training objectives.

Consider the definition of starting strength. To train starting strength you will work with 50-70% of your 1-rep max.

Does this mean you will grab a light sandbag and perform a few leisurely sets?

NO!

To train starting strength, you need to move the weight FAST! This style of training is ballistic. This form of training is no less intense than heavier lifts of 2-5 repetitions.

To be fast, you must train fast. To train fast, you must explode throughout the movement.

I see many athletes fall in love with their 1-rep maximum. They neglect the importance of speed strength, instead focusing on weight lifting numbers.

Guess what?

As an athlete, you must lift with the intention of becoming a BETTER ATHLETE, not a weight room stud.

One of the reasons I enjoy sandbag training is the element of simplicity. When training with a sandbag, you may not even know how much weight you are lifting. Your training partner cannot count the 45-pound plates on the bar. All he sees is a bag filled with sand.

I was once hired to develop a strength training program for a football running back. One of our objectives was to increase starting strength. Unfortunately, the young man was more concerned with the opinions of others than he was about improving athletic performance. He would not train with 70% of his 1-rep max for fear onlookers would believe “that was all he could lift”. He wanted to load the bar with as much weight as possible to impress fellow gym members. His primary concern was his one rep max on the bench press.

Do not make this mistake!

I honestly do not know how much I can bench press. I do not care. What I do know is that I have always been a strong fighter inside the ring. Forget about how much weight you can “max”. Put your ego aside and focus on becoming a faster, more explosive athlete.

There is nothing wrong with the bench press. It is a quality movement. Unfortunately, many athletes overemphasize the exercise. Everyone wants to improve their bench press numbers.

What about Overhead Squats, Dumbbell Snatches, or One-legged Squats?

What is the obsession with benching?

Do not overemphasize one exercise, or one repetition scheme. Cycle your strength training program to target different objectives. Incorporate variety when improvements begin to subside.

CONVENIENT AND EFFECTIVE

"Do what you can, with what you have, where you are." – Theodore Roosevelt

The life of a combat athlete can resemble a roller coaster ride. We have good days, and bad days. The training regimen of a fighter is physically and mentally exhausting. Occasionally, you may need a break from the action. Perhaps you lack the desire and motivation to work through your traditional routine…

There are days when I cannot be confined by the walls of the gym. I need to get outside and breathe the fresh air. I strap on a weighted backpack and head for the woods. I hike with the weighted backpack, stopping occasionally to perform one of many bodyweight exercises.

If you find yourself in a similar situation, you can convert a backpack into an inexpensive weighted vest that will crank up the intensity of your exercise routine.

A Sandbag Backpack

Thus far, I have illustrated several exercises with a large sandbag. I recommended stuffing your sandbag with zip-lock bags filled with sand. If you followed my advice, you can easily create a mini-sandbag by filling a backpack with the zip-lock bags. You can quickly transform a backpack into an effective weighted vest. With this pseudo-weighted vest, you can perform a variety of exercises. Whether you prefer hiking in the woods or staying within the confines of your living room, there are several ways to incorporate the weighted backpack into your workout.

These exercises can supplement a sandbag routine (not replace it).

Pushups –Pushups are an excellent exercise for the arms, shoulders, and chest. If you can perform 40 pushups, you should consider adding weight to the movement with a weighted backpack.

Most backpacks can comfortably hold 30-50 pounds. Start light and gradually increase the weight. You will be surprised at the difficulty of weighted pushups.

A Few Pushup Variations

Elevated Pushups – Elevate your feet from a chair or bench to increase the difficulty of your pushup routine. By elevating your feet, you increase the workload displaced to the shoulders, arms, and chest.

If you can easily perform 50 pushups, I recommend these advanced variations. To continually progress, you must increase the intensity of your training program.

By adding weight to your pushups, you will reduce boredom, while increasing the difficulty of the movement.

Between Chair Pushups – Perform pushups between two chairs to increase the range of motion. Drop down as low as comfortable between the chairs.

Advanced Chair Pushups – This version of the pushup is one of the best upper body exercises that you can perform. You will perform pushups between two chairs, while your feet are elevated from a third chair. This pushup style is very difficult, especially with a weighted backpack. If you can perform 20 reps with 50 pounds on your back, you are making excellent progress.

I highly recommend this pushup variation. This exercise will blast your upper body in no time.

*Two additional pushup variations that I highly recommend are **Fingertip Pushups** and **Knuckle Pushups**. By performing pushups from your fingertips and knuckles, you will strengthen the hands, wrist, and fingers. These two exercises are excellent for combat athletes who strike with their hands and fists.*

Bodyweight Tricep Extension – For this movement, you can use a chair, bench, or secured barbell. Bend at the elbows, dropping the head below your hands. Keep the elbows in, pushing up with the triceps.

I recommend starting this exercise without a weighted backpack. When you can perform 10-12 repetitions with your bodyweight, you can begin to add weight. Most individuals muster just a handful of reps on their first attempt. This version of the tricep extension will develop massive arms.

Dips – You can perform dips between two chairs, or parallel bars. Lower your body between the bars. Pause at the bottom, and press up until your arms lock at the elbows.

When you can perform 12-15 repetitions with your bodyweight, it is time to add weight to the movement.

Pull-Up Power

Most people do not include pull-ups in their routine. They prefer fancy resistance machines such as the Lat Pull-Down.

Why do so many people choose exercises such as the Lat Pull-Down? The answer is simple. These machines are much easier than pull-ups. Consider that the average person cannot perform 10 pull-ups. When these individuals arrive at the local gym, they opt for a machine that allows 10 repetitions. They add a few grunts and groans and begin to believe they are working hard.

The pull-up bar has made cowards of many men. Unfortunately, society condones hard work, instead choosing the easy way out…

As a fighter, you must leave the lazy majority behind. In my opinion, an athlete should be able to perform at least 10 pull-ups, preferably many more. I know heavyweight boxers who can pump out 15 reps on the pull-up bar.

Let's now look at a few pull-up variations…

Pull-ups - The traditional Pull-up involves a shoulder width grip on the bar. Your palms should face away. Lower yourself until the arms are completely extended and straight. Pull yourself up until your chin comes over the bar. You can add variety to this exercise by gripping the bar with a narrow grip or a wide grip. The wide grip will shift emphasis to the upper back while the narrow grip works the shoulders.

In the illustration, I am wearing a backpack filled with sand. The added weight of the backpack dramatically increases the intensity of this exercise. I recommend first achieving 10-12 bodyweight pull-ups before adding weight.

Where can you perform pull-ups?

If there is a will, there is a way. In the previous illustration, I am happily pulling away on a pair of monkey bars at a local park. It is always fun to train at the park, particularly when the kids see you hanging from the bar with a backpack over your shoulders...

"*Hey Mister, what's in the bag?"*

I also recommend purchasing a detachable doorway pull-up bar. I purchased the bar illustrated to the right for less than $30. These pull-up bars are very convenient, particularly during the winter when frozen pull-up bars can create a "sticky" situation. The detachable bars require no screws or installation. It simply hangs on the door hinges. I have had 250 pound heavyweights pull from the doorway bar without problems. The bars are inexpensive, convenient, and effective.

Chin-ups – To perform chin-ups, you will grab the bar with the palms facing in towards your body. Chin-ups will target the biceps, along with the shoulders and back.

Another variation involves grabbing two monkey bars and pulling your head up between the bars. I like to incorporate a variety of pull-up movements to target the muscles from as many angles as possible.

With or without the weighted backpack, you can expect an awesome upper body workout.

One-arm Pull-ups – For this variation, you will attempt to pull your bodyweight with one arm. Wrap a towel around the bar. One hand will grab the towel, the other will grab the bar. Try to minimize the work done by the hand that holds the towel. Focus on pulling with the hand that is around the bar. Work both sides evenly.

This variation is not a true one-arm pull-up, but it is the next best thing.

Towel Pull-ups – This variation is awesome for the forearms and grip. Hang a towel from the bar and grab it with both hands. Pull yourself up to the side of the bar. Alternate sides for each repetition. For example, pull to the left of the bar, then the right …

A routine that incorporates towel pull-ups and sandbag lifting will develop awesome grip strength. Please take my advice and strengthen the hands.

Monkey Bars – The monkey bars may appear childish, but are actually quite challenging. Strap on a backpack full of sand and maneuver yourself back and forth on the bars. Going back and forth on the monkey bars with a weighted backpack will do wonders for pull-up strength. Try to work sets of 10 trips back and forth. Add to the difficulty by going backwards on the bars.

One common limitation on pull-up ability is grip strength. By working back and forth on the monkey bars, you will create the grip strength necessary for high repetition bodyweight pull-ups.

L Pull-ups – This variation will challenge the core, along with the upper body. Hold your legs parallel to the floor, so your body forms the letter L. Maintain this position as you perform pull-ups.

I highly recommend this pull-up variation. L Pull-ups are VERY difficult.

Climbing – Climbing is one of the most functional exercises that you can perform. Whether you climb a rope, mountain, or pole, you can expect an awesome strength workout.

Climbing also carries the element of danger. I have never seen anyone fall from a nautilus machine. Climbing provides an extra incentive to hold on.

Be careful when climbing (*and don't forget to read the disclaimer at the beginning of this book!*).

All joking aside, climbing is truly an excellent exercise. It will strengthen the hands, arms, back, and shoulders. In the illustration on the right, I am climbing the pole of a swing set while wearing a weighted backpack. I highly recommend this total-body exercise.

Reminder…

Earlier, I stated that functional training prepares the body for *real-world challenges.* Consider the importance of this definition. What would you do if you were hanging on for your life? Do you have the strength to pull yourself back to safety?

Most of us will never be hanging from a tree limb, but if you are, let's hope you have been doing your pull-ups…

Achieving 20+ Pull-ups

Anyone who has ever performed pull-ups shares one common goal. We all want to improve our pull-up totals. Once you hit 12 pull-ups, you will want to hit 15. Once you can do 15, you will shoot for 20. It is human nature to want MORE. We all want more money, more power, and more pull-ups!

Let's look at a few strategies that you can use to increase your pull-up totals.

1. Perform **One-arm Pull-ups**, **L-Pull-ups**, and **Towel Pull-ups**. These pull-up variations will do wonders for your pull-up totals.

2. Add weight to your pull-up routine by using a backpack filled with sand. Once you can perform 10-12 bodyweight pull-ups, you can incorporate weight into your pull-up session. The added weight will greatly increase your pull-up strength.

3. Practice hanging from the pull-up bar with <u>one hand</u> at a time. The average person will struggle to hold himself with one hand for more than 10 seconds. I recommend incorporating one-arm hangs during each pull-up training session. Start your routine by hanging from the bar with each hand. Perform 3 sets of 10 seconds. Increase the time as your strength improves. You can start and finish your routine with one-arm hangs. This basic movement will greatly improve your pull-up totals.

4. Hang from the pull-up bar between each repetition that you perform. For example, rather than pausing briefly on the bottom portion of the movement, hang from the bar for 10 seconds. You will perform one pull-up, then hang from the bar with extended arms for 10 seconds. Continue to alternate 10-second hangs between each repetition. You will not be able to perform as many reps, but your overall pull-up strength will improve drastically.

5. Rather than lifting your chin over the bar, pull up until your chest touches the bar. For each repetition, you will touch your chest to the bar. This variation increases the range of motion, making each repetition more difficult. Traditional pull-ups will become much easier after training with this variation.

6. Use the monkey bars. If you train at a park, start your pull-up session with a few trips down the monkey bars.

You can use each of these strategies to greatly increase your pull-up strength. I recommend steps 1-3 on a weekly basis. You can use these techniques during each pull-up workout. I typically start my pull-up routine with weighted pull-ups, and finish without weight.

Use steps 4 and 5 when you are having difficulty improving your pull-up totals. By switching to either of these techniques for one or two weeks, you can usually improve your overall pull-up strength by one repetition.

Step 6 is useful if you live close to a schoolyard or park with monkey bars.

Repetition Strategies

These six techniques are even more effective when integrated with a well-planned repetition strategy. Below I have listed three common strategies that many athletes have successfully used to increase their pull-up totals.

Pyramids – Pyramids are an excellent technique for increasing the total number of repetitions performed during a workout. The best way to describe a pyramid is with an example:

Pull-up Pyramid – 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

For this pyramid, you begin with 1 pull-up. You will then rest briefly and perform 2 pull-ups and continue to climb the pyramid until you reach 10 pull-ups. You then climb back down the pyramid by performing 9 pull-ups, then 8, then 7, etc… Your goal is to perform the pyramid as quickly as possible. The pyramid will become much more difficult as you approach 10 pull-ups. You will require more rest between sets as you reach the peak point in the pyramid. This pull-up pyramid consists of 100 total repetitions.

Suppose that your 1 set maximum for pull-ups is 15 repetitions. If you perform 3 sets, you will probably muster out a set of 15, 14, and then 13. After your first set of 15 pull-ups, you will have difficulty repeating your 1 set maximum, which is why I have estimated your second set at 14 reps, and your third set at 13 reps. Your total workout will consist of 42 pull-ups. Even if you are able to perform 3 sets of 15, your workout will only consist of 45 total repetitions. It becomes obvious that the pyramid system is more effective. You will perform many more repetitions per workout, which will greatly improve your pull-up totals.

Ladders – Ladders are similar to pyramids. You will climb up the ladder, but not down.

Pull-up Ladder – 1, 2, 3, 4, 5, 6 - 1, 2, 3, 4, 5, 6 - 1, 2, 3, 4, 5, 6

This ladder consists of 6 steps. You begin with 1 repetition. You then perform 2 repetitions, and continue climbing until you reach 6 pull-ups. Rest is minimal between sets. Your rest should not exceed the time required to perform the previous step in the ladder. For example, after performing 1 repetition, you will get off the bar and rest as long as it took you to perform the pull-up, before proceeding to step 2 (2 pull-ups).

Continue to climb the ladder until you reach the highest step. Do not climb the ladder to the point of failure. For example, suppose you reach step 6 and can barely complete 6 repetitions. Do not attempt a 7th step. The pyramid and ladder systems are not designed to push you to failure. They are designed to increase the total number of repetitions performed during each workout. Avoid failure when training with ladders and pyramids. Only climb as high as you are comfortable.

In the previous 6-step ladder example, you will climb the ladder three times. The total workout will consist of 63 pull-ups. Once again, this ladder is much more effective than 3 sets performed to failure.

When you train to failure, you will require more time for recovery. If you continually train to failure without adequate rest, your body will not have time to improve between workouts. The pyramid and ladder systems are effective because they allow you to perform more repetitions per workout, without causing excessive muscular fatigue. By performing more repetitions, the body becomes more accustomed to the movement. The muscles become stronger and more proficient with the exercise.

I recommend testing your one set pull-up maximum each month. Do not test your maximum on a weekly basis. You will not have enough time to significantly increase your totals. Allow one month between pull-up "tests".

20 Minute System – Another effective method for increasing pull-up strength involves performing one set of pull-ups per minute. Set a timer and with each new minute, you will mount the pull-up bar and perform 5 repetitions. After 20 minutes, you will have performed 100 repetitions. The first few minutes will be easy, but as you approach 20 minutes, it will become much more difficult to achieve 5 full repetitions. When you can perform this routine with ease, you can increase the total number of repetitions per minute.

Another useful method for improving pull-up totals is to integrate weighted pull-ups within the 20 Minute System. For the first 10 minutes, you will perform 3 repetitions per minute with a weighted backpack. You will then finish the final 10 minutes with 5 repetitions per minute, without the weighted backpack.

This routine consists of 30 weighted repetitions and 50 bodyweight repetitions. I recommend starting your weighted sessions with 20 pounds. Increase the weight gradually as your strength improves.

100 Pull-ups – Complete 100 pull-ups throughout the course of the day. Perform the pull-ups during a set period (ex. 1 hour), or sporadically throughout the day. Choose a system that is convenient with your schedule. Do not perform sets to failure. For example, if your one set maximum is 10 repetitions, perform sets of 5 or 6.

The Best System

Do not limit yourself to one repetition strategy. Use a system that incorporates variety. I recommend performing pull-ups 2-4 days per week. Avoid training to failure and you can perform pull-ups several days per week. You can dedicate one day to each repetition strategy, or you can dedicate an entire week to each.

As a fighter, you must become proficient with your bodyweight. Pull-ups are an excellent measure of strength. I highly recommend a regular dose of pull-up exercise.

The Weighted Backpack Part II…

Thus far, I have illustrated several exercises that can be enhanced with a weighted backpack. You have seen a variety of pushups, dips, and pull-ups.

What else can you do with a weighted backpack?

Your options are endless. I will not claim that a weighted backpack is the best thing since sliced bread, but it is an effective way to enhance many bodyweight exercise routines.

Bodyweight Squats – Strap on your backpack and perform squats. In the illustration, I have extended my arms to assist with balance. The weight of the bag may cause you to lean backwards. You can offset this imbalance by extending the arms. You can also perform lunges with the backpack.

Recommendation

Strap on your backpack and go for a hike. Walk for 25 minutes. Every 5 minutes stop to perform 50 squats and 20 pushups. After 25 minutes, you will have performed 250 squats and 100 pushups, in addition to your weighted hike.

Use your imagination. Think outside the box and have fun with it…

During your hike, you can take off your backpack and perform an endless number of lifting exercises. A few examples include curls, shoulder presses, and snatches. Once again, your options are endless. If you need to get outside and breath the fresh air, strap on your weighted backpack and head for the woods. I enjoy the physical and mental aspect of a hike in the woods. I do some of my best thinking while hiking outdoors.

Summary

The life of a fighter is physically and mentally draining. There will be days when you need a break from your customary routine. The exercises from this chapter offer an excellent outlet for physical and mental regeneration. These exercises should not replace your traditional strength or conditioning routine, rather they should supplement a complete program.

I have attended training camps that were so demanding that an occasional "day off" was necessary to provide active recovery from the grueling gym workouts. I would head for the woods and clear my thoughts while performing a workout consisting of bodyweight style exercise. These exercises keep the body and mind fresh. I highly recommend an occasional "private" session. Leave the hustle and bustle of the gym behind to clear your mind. You will come back the next day ready for battle. Journey outside and enjoy the fresh air.

Enjoy your time outside because our next chapter will deliver some of the most gut wrenching training sessions you have ever experienced…

WARRIOR CONDITIONING

"Be fit for more than the thing you are now doing. Let every one know that you have a reserve in yourself; that you have more power than you are now using. If you are not too large for the place you occupy, you are too small for it." – James Garfield

The conditioning requirements of a fighter go beyond general fitness. When you step into the ring, you put your life on the line. Make no mistake about it, combat is dangerous. Combat sports entail an element of danger that most individuals will never understand.

The average human being has never been punched in the face. The average human being has never been hit with a left hook to the liver. The pain and fatigue that result from these attacks cannot be defined in a science book or fitness manual. Unless you have been there before, you do not understand the physical demands of combat. No textbook or certification program does justice to the intense requirements of a combat athlete. It is a lonely feeling when you are completely exhausted while trying to fend off an aggressive opponent. I commonly use a three-line phrase to describe the intense nature of combat…

No Teammates, No Timeouts, Nowhere To Hide

You enter the ring alone. There are no teammates to assist you. You cannot call a timeout when you are in trouble. There is nowhere for you to hide. You have two options…

Fight or fold!

As an athlete, you will fight. Unfortunately, when extreme fatigue sets in, many athletes experience a change of heart. I commonly describe this transformation as "breaking". When a fighters "breaks", his motivation shifts from victory to survival. The athlete no longer believes in his ability to win. The fighter will either quit, or be content with going the distance.

Vince Lombardi once said, "*Fatigue makes cowards of men*." Read these famous words carefully. Notice that it does not say "some men". We all have a breaking point, certain individuals are just more difficult to break. Keep this in mind when you are training. Do not assume that you are too strong to break.

Take a moment to reread the quotation that introduced this chapter…

*"Be fit **for more** than the thing you are now doing. Let every one know that **you have a reserve** in yourself; that you have **more power** than you are now using. If you are not too large for the place you occupy, you are too small for it."*

Never underestimate your opponent. Always train as if you are preparing to fight King Kong. Visualize your opponent in training. Are you going to let him outwork you in the gym? If he does, there is a good chance that he will outwork you in the fight.

When you lose a fight, YOU lose. There are no teammates to blame. You are responsible for winning or losing. YOU decide.

Do Not Confuse Strength With Conditioning

Thus far, I have illustrated several strength training exercises. These exercises will develop explosive power throughout the body.

Unfortunately, many athletes focus too much energy towards strength training. These individuals are misled to believe that strength training and conditioning are synonymous.

WRONG!

Strength training and conditioning are not the same. Heavy weight lifting will not condition an athlete for combat. As a fighter, you must perform intense conditioning drills that train the energy systems used during combat.

Combat sports are anaerobic in nature. Anaerobic means "without oxygen". During anaerobic exercise, the body generates energy from non-oxidative sources. Anaerobic events, such as boxing, wrestling, and grappling, require muscles to contract at maximum intensity for short periods. Consider the boxer who throws a powerful combination or the wrestler who slams his opponent to the ground. In both situations, the athlete must call upon his anaerobic system for energy.

Competition is fast paced and explosive. To be successful, you must maintain explosive power and speed throughout the match. It is not enough to start the fight strong, if you suck wind in the later rounds.

Your conditioning program must mimic the intensity of combat.

Change With The Times

For many years, roadwork has been the cornerstone of combat conditioning. Since the inception of combat sports, fighters have taken to the road in search of improved condition. A typical roadwork session would consist of five or more miles, performed at a moderate pace. This style of roadwork has existed for more than a century. Sadly, it continues today…

The conditioning workouts of many fighters originate out of tradition, rather than science. The thought pattern is that if distance running worked then, it must work now. Most trainers do not take the initiative to keep pace with advancements in sports science. Instead, they continue to preach archaic conditioning methods to their fighters.

As a young teen, I would often run 5-6 miles per day when preparing to fight. I did not know any better. Fortunately, I learned from my mistakes...

The human body is an amazing creation, under constant observation by well-educated scholars. Scientists understand the intricate details of the body. Countless studies have proven that slow paced jogging does not train the energy systems used during combat. Jogging should not constitute a significant portion of your conditioning program. There are far superior ways to train for the intense nature of combat sports.

Your conditioning program must mimic the physical demands of combat. Jogging is a slow paced, aerobic activity performed for extended periods. Combat is a fast paced, predominantly anaerobic activity. Combat consists of explosive movements such as kicks, punches, and takedowns. You compete with predefined work-to-rest intervals. For example, you fight for a three-minute round, and then rest one minute between rounds.

When you fight, you must be prepared for the most menacing opponent. Combat is unique from other sports such as Track and Field. Consider the sprinter who prepares for a 400-meter race. This individual will always run the same 400 meters, never more, never less. The track athlete can visualize each stride in his race. The distance never changes. The physical requirements are always the same.

Combat is unpredictable. You never know what to expect. You may end up fighting an aggressive attacker. It is amazing how a three-minute round can become one of most intense moments of your life. You may be forced to fight each second of the round. You may be pushed to a level of fatigue that you have never experienced before.

What will you do in this situation?

You sure as hell won't rely on anything obtained through long distance jogging...

During these intense situations, you will be forced to dig deep within. You will be pushed to the extreme, both physically and mentally. An experienced fighter **always** trains for this situation. You should never enter the ring unsure of your condition. You must enter the ring with confidence that no one has trained as hard as you. You should not shy away from an intensely fought contest. Rather, you should encourage this pace, confident that your opponent will be first to break.

Consider the following analogy... Have you ever stepped on a piece of gum? What a pain in the ass it is to remove the gum. The gum sticks to your shoe like superglue. When you enter the ring, you must be the piece of gum. Stick to your opponent with relentless intensity. No matter what he does, he cannot shake you. Turn the fight into a battle of wills. If you have trained properly, you will be the last man standing.

Do not confuse my words as an attempt to scare you from competition. I am simply stating the facts. Combat is not a sport that you "play". Fighting is not a game. Combat is about putting your life on the line. You must enter the ring in supreme physical condition.

You must train with intensity. The conditioning drills illustrated in this chapter are extremely demanding. You will be tested physically and mentally. Do not shy away from the challenge. Learn to fight through fatigue. Enter the ring with confidence in your conditioning.

General Physical Preparation

Combat sports are physically exhausting. Many athletes train several times each day. Fighters have several objectives that must be addressed while training. Examples include skill training, conditioning, strength training, and agility work, just to name a few. There are many pieces to a combat training puzzle.

Question Break: How will my body be able to handle the intense demands of a complete training program?

Answer: A little General Physical Preparation will go a long way!

General physical preparation, commonly dubbed GPP, refers to various conditioning exercises, both weighted and non-weighted, designed to increase your ability to sustain intense workloads.

GPP increases your ability to train hard for extended periods. Essentially, your work capacity increases, while the time required for recovery decreases. When you can train harder and recover faster, you are destined for dramatic improvements in overall strength and conditioning. GPP is beneficial to ALL athletes, particularly those engaged in combat sports.

Combat athletes require "guts". When shit hits the fan, you need the physical AND mental perseverance to continue fighting. GPP will develop the mental toughness necessary for combat. These workouts are not for the feint of heart. GPP will challenge the body and mind. There will be times when you question your ability to continue. With a little perseverance and dedication, you will improve. In short, the physical and mental benefits derived from GPP are truly innumerable.

Laying The Foundation

GPP lays the foundation for an intense training season. Benefits of GPP include improved:

- Aerobic endurance
- Anaerobic endurance
- Strength
- Power
- Coordination
- Flexibility
- Motor skill development
- Body composition
- Recovery between workouts

GPP improves all-around physical condition. Unfortunately, most coaches and athletes are "missing the boat" regarding the benefits of GPP. Coaches today are too quick to focus on sport-specific training. Consequently, their athletes never develop sufficient levels of general fitness. Certain muscle groups and physical abilities are not adequately developed during sport-specific movement.

For example, a novice boxer may begin training with insufficient hip flexor mobility and strength. This young fighter enters the gym on day-one without proper physical preparation. Rather than developing general fitness, the youngster is instructed to hit the heavy bag. The athlete's deficiencies are never addressed or improved. Many young fighters begin sparring and competing without first developing adequate levels of general fitness. These fighters will never reach their true potential.

Unfortunately, insufficient GPP is not limited to beginners. Many world-class athletes lack all-around physical preparation. All athletes can benefit from GPP training. There are **no exceptions** to this rule.

Consider the boxer who is preparing for a championship bout. He will attend a six-week training camp to prepare for the fight. The camp will consist of intense skill training sessions, sparring, and sport-specific conditioning drills. A poorly conditioned fighter will be unable to cope with the rigors of camp.

Consummate professionals must report to camp prepared for intense training sessions. There is nothing worse than a fighter who arrives at camp overweight and out of shape. They waste the first three weeks of camp trying to lose weight. Combat sports require skill. Training camp must emphasize skill training, strategy, and technique.

GPP is essential to prepare for the rigors of an intense training camp (or season). GPP lays the foundation necessary for the physical demands of sparring and sport-specific conditioning drills. A high work threshold is imperative when multiple training sessions are required each day. GPP lays the groundwork for more specialized training, often referred to as SPP (specialized physical preparation). Examples of SPP for combat athletes include sparring and focus mitt drills. A fighter should not spar without first developing a solid foundation.

GPP workouts are intense and time efficient. You can always find time for GPP and will not need any fancy equipment. You can use bodyweight exercise, sandbags, and common household items such as a sledgehammer or wheelbarrow.

Convenient, inexpensive, time efficient, and EXTREMELY effective.

What more could you ask for?

Non-weighted GPP

Non-weighted GPP refers to a variety of bodyweight exercises used to improve all-around conditioning. When creating a non-weighted GPP program, you should choose exercises that work the entire body. Successful GPP programs target multiple muscle groups. There is no place for “isolation” training. Several movements should be intertwined to condition the entire body.

Variety is important when performing GPP. You cannot perform the same exercises during each session. You are not looking for muscular adaptation. You should challenge the body and mind during each GPP session.

Non-weighted GPP can provide an excellent warm-up to a strength training session. These exercises can also be used to simulate the work-to-rest ratios of competition. For example, you can perform 4 x 3-minute rounds of GPP style exercise. These timed sessions are often referred to as Minute Drills. Fighters commonly use Minute Drills to improve their endurance over a specified time period.

If you compete with 4 x 3-minute rounds, you should be able to perform 4 rounds of near maximal GPP work. These conditioning drills will dramatically improve work capacity. You will develop the ability to maintain a relentless pace inside the ring, while recovering much faster between rounds.

Let's now look at some common non-weighted GPP movements…


Step 1


Step 2


Step 3


Step 4

Burpees –You can expect to develop a love-hate relationship with this exercise. You will love the results, but hate the vomit-like feelings that a Burpee workout induces.

To perform Burpees, you will start from a squat position with hands on the ground in front of you. You will then kick your feet back (Step 2) into the downward position of a pushup. From here, you will push up with the arms, while simultaneously kicking the feet back to the starting position. You will essentially perform a pushup, as you return the feet to the starting position. You will complete the movement by exploding into the air. As soon as you land, drop back to Step 1 and continue. Burpees must be performed at a fast pace. Most athletes will average between 10 and 15 repetitions per 30 seconds. This bodyweight exercise provides tremendous conditioning benefits.

Please note that Burpees are not the same as Squat Thrusts. Burpees are much more demanding. When performing Squat Thrusts, you simply "stand up" during Step 4. Burpees require an explosive jump. Squat thrusts also call for straight arms during the kickback in Step 2 (upright position of a pushup). It is much more difficult to drop into the bottom position of a pushup. When you drop the chest to the floor, you must push "back up" when moving from Step 2 to Step 3.

Squat Thrusts do not involve this pushup motion. To compare Squat Thrusts to Burpees would be like comparing a child on a tricycle to a Tour de France bike

racer. There is NO comparison. Find time for a regular dose of Burpee conditioning.

Below I have illustrated a Burpee variation that involves a medicine ball…

Medicine Ball Burpee – For this variation you will perform a traditional burpee with one exception. After returning to the crouch position in Step 3, you will grab the medicine ball and jump upwards, bringing the ball overhead with outstretched arms. Place the ball back in the starting position and repeat.

This exercise provides a total body workout. You can gradually increase the weight of the ball as you improve.

If you have limited time to train, drop down and perform a few Medicine Ball Burpees. It will not take long for you to be drenched in sweat, from head to toe.

You will not find many exercises that match the intensity of Burpees.

Mountain Climbers - With hands stationary, alternate the feet back and forth. One leg should be tucked, one leg extended, with weight on the balls of your feet

Mountain Jumpers With hands stationary, kick both feet back together. As soon as the feet land, immediately return to the start position. Continue at a brisk pace.

Mountain Jumpers are similar to Squat Thrusts. Mountain Jumpers however are performed with a faster tempo. You do not stand up between repetitions. Your feet spring back and forth quickly, at a non-stop pace.

Split Jumps - Begin with hands on hips, chest and head held high. Weight should be on the balls of the feet. Quickly shuffle the feet back and forth, emphasizing movement of the hips.

Grasshopper – This exercise is excellent for general conditioning and core strengthening. Begin with your hands and feet touching the floor. You will initiate the movement by bringing your right foot underneath your body until it touches your left hand. After touching your hand, return your right foot to the starting position and repeat the movement by bringing your left foot across the body to your right hand. Continue this back and forth motion at a brisk pace. Your hands will remain stationary, as your legs continuously swing towards opposite hands.




Lateral Jumps – Jump back and forth over an object (such as your sandbag). Minimize contact with the ground. Focus on quick, powerful bursts into the air.

Upon landing, immediately explode back into the air, in the opposite direction. Continue at a brisk pace, maximizing height with each jump.

Lateral Jumps offer a convenient way to incorporate non-weighted GPP with weighted GPP. Later in this chapter, I will demonstrate several weighted GPP movements. Many involve our good friend the sandbag. You can begin by carrying the sandbag (weighted) and occasionally stop for a set of Lateral Jumps (non-weighted) over the bag.

Additional Non-weighted GPP Movements

Several bodyweight exercises can be incorporated into a non-weighted GPP program. A few examples include:

- Jumping Jacks
- Running in place (with high knees, fast paced)
- Pushups
- Jumping rope (more info on jumping rope on page 92-95)
- Shadow boxing

Non-weighted GPP workouts should include between two and six exercises, performed for a specified time period. You can either perform one extended GPP session (ex. 6-10 minutes of continuous exercise) or perform "rounds" of GPP (ex. 4 x 3-minute rounds). Let's look at an example of each…

Sample 10-Minute GPP Session

- Burpees x 30 seconds
- Split Jumps x 30 seconds
- Jumping Jacks x 30 seconds
- Grasshoppers x 30 seconds
- Shadow boxing x 30 seconds
- Continue for 10 minutes without resting

This routine consists of five exercises, each performed for 30 seconds at a time. You will move from one exercise to the next without rest. You will repeat 4 continuous rounds of this cycle, totaling 10 minutes of work. There is no rest between rounds. After ten minutes of exercise, you will be soaked with sweat. Your heartbeat will sound like a percussion drum.

There is no excuse to skip a 10-minute session of GPP. Regardless of time constraints, you can always find 10 minutes to train. This workout can serve as an excellent warm-up to a strength training session. It can also be used on its own, or in conjunction with additional conditioning drills.

Sample 3-Minute Round of GPP

- Burpees x 30 seconds
- Jumping Jacks x 30 seconds
- Grasshoppers x 30 seconds
- Burpees x 30 seconds
- Jumping Jacks x 30 seconds
- Grasshoppers x 30 seconds

This routine involves 3 minutes of continuous exercise. This drill is excellent for fighters who compete with 3-minute rounds.

Suppose you are preparing for a 4 round bout. You could perform this drill for 5 rounds. Your rest period between rounds should not exceed one minute. I recommend either one minute or thirty seconds of rest between rounds. You will probably need the entire minute of rest when first attempting these drills. As your fitness improves, you can gradually decrease the rest between rounds and/or increase the number of total rounds.

You can vary the length of each round according to your competition (ex. 2-minute rounds, 3-minute rounds, 5-minute rounds, etc…)

I have provided several complete conditioning routines in a later chapter.

The Jump Rope

The jump rope (rope skipping) is an excellent tool for GPP. You can purchase a jump rope for less than $10. Benefits include:

- Enhance anaerobic endurance
- Improve agility and footwork
- Improve coordination, balance, timing, and rhythm
- Faster hands and feet
- Strengthen arms, wrists, shoulders, and back

A Few Pointers

- Use a flat, non-abrasive floor surface
- Land with soft feet, do not stomp into the ground
- Land on the balls of the feet
- To determine the proper length for the rope, step on the middle and the handles should reach your armpits.

Turning The Rope

The traditional rope turn begins with the upper arms held close to the body. The forearms are held down and out at a 45-degree angle. With this arm position, the hands and wrists will do most of the work. You will make small circles with the wrists, minimizing arm movement.

To increase the workload of the arms, keep the elbows in by your sides, with the forearms parallel to the ground.

Regardless of hand position, focus on speed when jumping rope. Turn the rope fast! If you turn the rope slow, you will miss the true conditioning benefits of jump rope training.

Jump Rope Variations

You can incorporate several variations into a jump rope program. Each variation will challenge your coordination and agility in a unique fashion. Below I have listed several variations that I encourage you to try.

Run In Place: Run in place while jumping rope. Land on the balls of your feet and flex the lower leg to form a 90-degree angle with the back of your thigh. You can run in place with the knees up or down. By lifting the knees up to hip level, you will target the quadriceps. By keeping the knees down, you will work the hamstrings.

Sprint In Place: A variation to running in place involves an all out sprint with the rope. You will remain stationary and jump rope with a "sprint" pace. For this variation, you should run in place with the knees up. This is an excellent exercise to improve anaerobic endurance.

Side-to-Side: Jump with your feet together in a side-to-side motion while skipping rope.

Side-to-Side Twists: A variation to the side-to-side jump involves a simultaneous rotation of the hips. While jumping from side-to-side, you will rotate the hips back and forth like a slalom skier.

Heel-Toe: Jump once to each turn of the rope, alternating your right and left feet from heel to toe. The heel and toe of opposite feet will contact the ground at the same time. For example, your right heel will touch the ground in sync with your left toe and vice versa.

Forward – Backward Spread: Alternate one foot forward and one foot backward as you turn the rope. The left foot lands forward and the right foot

lands back on the first turn, then the right foot lands forward and the left foot lands back on the second turn. Continue in this alternating fashion. This variation is commonly referred to as the Ali Shuffle.

Front-to-Back: With your feet together, alternate jumping forward and backward while turning the rope.

Corner Jumping: Jump in the pattern of a square. You will jump to each corner of the square while turning the rope. This variation will improve your agility in all directions. You will jump forward, backward, and side-to-side.

Straddle: Start with your feet together for the first turn of the rope. Spread your feet to the sides for the second turn. Continue as if you were performing jumping jacks with the rope.

Cross Straddle: For this variation, laterally cross the right leg over the left leg, and then cross the left leg over the right leg. Continue in this alternating fashion.

Criss-Cross: Cross the arms at the elbows on the downward swing of the rope. Jump through the loop of the rope that is formed in front of your body. Uncross the arms on the next downward swing. Continue to criss-cross the rope in this alternating fashion.

Single Leg Bounce: Bounce once to each turn of the rope, using one foot at a time. Alternate between right and left foot. A sample routine involves a ladder where you start with 1 jump on the left foot, then 1 with the right, 2 with the left foot, then 2 with the right, 3 with the left foot, then 3 with the right, and so on until you reach 10. You can then start over with 1 jump per foot and continue.

Double Unders: Make two turns of the rope for every one jump. Keep your feet together and turn the rope fast to allow two full turns for every jump.

Double Unders – Single Leg: A more difficult variation is to perform a double under on one leg at a time. Work 5 double unders on the left leg, and then 5 on the right leg. Continue with this back and forth pattern.

Putting It All Together

If jumping rope is new to you, you can begin by performing 1 or 2 minute rounds followed by 1-minute of rest. Eventually, you should progress to 3-minute rounds on the jump rope. During this time, you can alternate between various jump rope styles. You can alternate between 30 seconds of all out jumping, followed by 30 seconds of less intense work. You can repeat this pattern with one of many jump rope variations. You can also perform each variation for 10-20 jumps and continue down the line. A third option involves changing variations for each round on the rope.

Additional Options

If you really want to crank up the intensity, you can purchase a jump rope with weighted handles. The extra resistance will strengthen the shoulders and arms. If you do not want to purchase a separate weighted rope, you can wear a light pair of wrist weights to add resistance while jumping rope. The added resistance is an excellent way to improve anaerobic endurance.

You can also reduce the period between rounds from 1-minute to 30 seconds. When you can jump rope for 6 hard rounds with only 30-seconds of rest between rounds, you are making excellent progress.

I have provided several jump rope circuits in a later chapter.

Weighted GPP

Weighted GPP is excellent for physical and mental conditioning. Your program should include a combination of weighted and non-weighted GPP. Each routine provides unique benefits.

Your sandbag is easily *converted* into an awesome weighted GPP tool. The directions are quite simple…

Instructions:

- Pick up the bag and run
- Collapse on the side of the road

Your sandbag conversion kit does not require any tools. You can quickly convert your sandbag into a brutal conditioning device. The only prerequisite for sandbag GPP is an indomitable will to succeed.

All joking aside, sandbag GPP is one of the most intense, effective forms of conditioning. These routines will mold you into an ass-kicking machine.

Let's review some of the more effective sandbag conditioning movements…

Sandbag Conditioning

Sandbag Hill Sprints - Sprinting hills with your sandbag is perhaps the most intense conditioning drill that you will EVER perform. Hill sprints are intense enough without the sandbag.

When you throw a sandbag over your shoulders, the intensity meter reaches an all-time high. This form of training is not for everyone. It will quickly separate the contenders from the pretenders. When performing this drill, you should use a light sandbag. I recommend starting with 50-60 pounds. You can increase the weight as your condition improves. Do not perform sandbag hill sprints more than once or twice per week. This drill is a perfect finisher to your weekly training program. There is nothing like a Saturday morning filled with sandbag hill sprints.

I recommend starting with 2 sprints. Always pick an even number for total sprints (2, 4, 6, etc.). You should alternate shoulders for each sprint. As you can see in the illustration, I carry the bag over my right shoulder. Alternate shoulders for each sprint (right, then left, etc.).

If you start with 2 sandbag sprints, you can then finish with 4-6 non-weighted sprints. Eventually, you can build up to 6-10 sandbag sprints. You can also construct an entire strength and conditioning routine on the hill. Alternate between sprinting and lifting. For example, sprint to the top of the hill, then clean and press the sandbag 10 times. Repeat this sequence 5-8 times.

This workout will be finished in less than 15 minutes, but you can expect the fatigue to last all day!

Sandbag Running – You do not need a hill to experience the joy of sandbag style running or sprinting. Simply throw a sandbag over your shoulder and start running. You can run for time or distance. I prefer to use the sandbag for short duration sprints. For example, you can perform 10 x 50 meter sprints with the sandbag. Add 20 pushups after each sprint to increase the challenge.

One Mile of Pain - Another option is to run with the sandbag for distance. Throw a sandbag over your shoulder and "travel" a mile. Try to complete one mile in less than 15 minutes. Switch shoulders every few minutes to balance the workload. When you can perform one mile in less than 15 minutes, increase the weight of your bag. Start with 75-100 pounds. Try to work up to 150 pounds.

Warning *- This form of conditioning is designed for* ***advanced athletes****. Do not perform weighted running more than 1-2 days per week.*

Carrying the sandbag for distance is an excellent way to develop the work capacity necessary for these demanding drills. When you carry the bag, do not be concerned with running or sprinting. Simply pick up the bag and begin walking. Sandbag carrying is deceivingly difficult. At first glance you may discredit the effectiveness of this weighted GPP movement.

Question Break: How hard can it be to carry a heavy sandbag?

Answer: Pretty damn hard!

Carrying a heavy sandbag will work muscles that you never knew existed. Your stabilizer muscles and core will struggle throughout this exercise. Sandbag carrying makes a great finisher to any workout.

I typically begin a strength training session with non-weighted GPP. This gets the blood flowing throughout the body. I then proceed with my strength work, and conclude with a finishing movement. The sandbag carry is one of the best finishers. There are several variations to the sandbag carry.

Let's look at a few…

Sandbag Bear hug – Grab the bag in a bear hug and begin walking. Use a heavy sandbag for this exercise. Do not use the same bag that you carry when sprinting. You should double or triple the weight used during sandbag sprints. If you sprint with 50 pounds, begin with at least 100 pounds when carrying the bag for distance.

As you begin to fatigue, you can vary your grip by throwing the bag over either shoulder. Switch back and forth between different holds. Each carrying style will challenge the body in a unique fashion.

You can perform sandbag carrying almost anywhere. You can carry the bag around your house for time, or walk down the road. I recommend walking either around the house, or around a defined perimeter.

When fatigue sets in, you do not want to be stuck a mile away from home. You will end up on the side of the road, unable to carry the bag. If you carry the bag around your house, you can walk without worrying whether you will have energy to make it home.

You can also carry your bag around a standard 400-meter track. The track is excellent for sandbag carrying as it allows you to monitor how much distance you have covered. Be prepared for some unusual looks from the walkers and joggers.

A third option is to measure out a distance of 100 or 200 meters. Walk back and forth. You can easily monitor distance, and will never be more than 200 meters from your starting point. This may not make sense now, but when you start carrying the bag, and lose the ability to walk any further, you will understand exactly what I am talking about.

Overhead Walk – Carry the bag overhead, with arms completely extended. This style of sandbag carrying is VERY difficult. You can expect to feel this exercise challenge the core (and every other muscle in your body).

An excellent variation to this exercise is to perform a 360-degree turn every 10 or 20 steps. You may look a little funny, but you can expect an awesome core-strengthening workout. Alternate the direction that you turn for each 360-degree spin. For example, walk 10

steps, and then perform a 360-turn to your left. Walk another 10 steps, and turn to your right.

Curl Walk – Curl the sandbag and begin walking. Maintain the upright position of the curl throughout the walk. Your arms will burn like never before.

The Overhead Walk and Curl Walk are much more difficult than the Bear Hug style carry. You will not be able to handle as much weight for these advanced variations, particularly the Curl Walk.

Record your time and/or distance whenever you perform the sandbag carry. Compete against yourself each time you use these movements.

Weighted GPP movements will develop a unique form of work capacity. These movements will develop dynamic strength endurance. Together with non-weighted GPP, you will dramatically increase the amount of work (training) that you can sustain.

The sandbag carry does not take long to complete. These exercises will challenge you physically and mentally in a way that words cannot describe. I HIGHLY recommend these weighted GPP movements.

Sandbag carrying may remind you of a strongman competition. Bodybuilder-style isolation exercise provides little value when attempting these movements. Sandbag GPP develops REAL strength. The pain that you feel during these exercises is similar to the pain and fatigue experienced during competition. This intense form of training will develop the mental fortitude necessary for combat.

If you are skeptical about sandbag carrying and its benefits, I suggest that you put aside 30 minutes of your life to attempt this exercise. In most situations, you will not need anywhere near 30 minutes to become a believer. Simply pick up a heavy sandbag and start walking. After 10 minutes, you will reconsider your opinion of sandbag carrying. If you are still not convinced, add more weight to the bag. Be forewarned, when you awake the following morning, you will feel soreness from muscles that you never knew existed.

William Feather once said, "*Success seems to be largely a matter of hanging on after others have let go*." Remember these words when carrying your sandbag.

A close relative to the sandbag carry is the Farmer's Walk…

Farmer's Walk – Grab a pair of heavy dumbbells and begin walking. Walk for distance or time. You must use heavy dumbbells to experience the true benefits of this exercise. The Farmer's Walk will develop awesome grip strength. After a minute of walking, your hands will beg you to let go. Continue walking until you can no longer carry the weight. Rest a minute, and repeat.

This exercise is an excellent finisher, and only takes a few minutes to complete. You can walk around the house, down the road, at a park, or back and forth across a room. Do not make excuses, pick up your dumbbells and get busy!

Farmer's Walk With Sandbags - If you do not have a heavy pair of dumbbells, you can perform the Farmer's Walk with two sandbags. Grab the handles of each bag and begin walking. Carry the bag until your grip gives out.

For a complete finisher, you can begin with the sandbag carry. Carry the bag as long as possible. Rest a few minutes and repeat for a total of three sandbag carries. Once the sandbag carry has exhausted every muscle in your body, proceed with the Farmer's Walk.

Grab two bags (or dumbbells) and walk until the weight becomes unbearable. Repeat for three sets. The sandbag carry and Farmer's Walk make a great team. Together, these movements will develop an indomitable will (while blasting your work capacity through the roof).

Dynamic Conditioning

The conditioning drills that follow will develop strength and muscular endurance. These exercises are not "pure" conditioning movements. These exercises will train the entire body, dramatically increasing strength and work capacity.

Sandbag Loading – This exercise is excellent for rotational power. Sandbag loading will strengthen the entire body. To perform this movement, you will need an elevated "platform" to load the sandbag.

In the illustration that follows, I am loading my sandbag onto a porch. You could also load the bag to the bed of a pickup truck or a sturdy table. The platform should be 3 feet or higher. Use a heavy sandbag for this movement.

Perform this exercise at a brisk pace to maximize the conditioning benefit. As you can see, I begin with my left foot closest to the porch. I lift the bag with both hands. I pivot the hips as I load the bag onto the porch.

As soon as the bag is loaded, pick it up and return it to the ground, on your opposite side. In the illustration, the bag begins on my right side. After loading the bag, I will return it to the LEFT side. I will then alter my stance so my right foot is closest to the platform. As soon as the bag returns to the ground, I will immediately pick it back up and continue loading, and unloading. You will load to your left, then unload the bag, then load to the right, and continue…

Perform sandbag loading as a "competition". Load the bag to the platform for 50 repetitions. Record how long it takes to finish the workout. Compete against yourself each time you perform this exercise. Competition is necessary for optimal motivation and performance. Whether you are a competitive athlete or not, you can always compete against yourself when training.



If you enjoy Sandbag Loading, you will definitely have fun with the next exercise…

Sandbag Fence Jumping – There is a good chance that you have not experienced anything like this exercise. You will not see this movement at any creampuff gym…

This exercise promises to attract some unusual stares from onlookers. Before you dismiss me as crazy, I HIGHLY recommend a session of Sandbag Fence Jumping. It will not take long for you to recognize and appreciate the effectiveness of this dynamic exercise. This exercise will develop explosive power throughout the entire body. If you want to develop the ability to slam someone to the ground, this exercise is a must!

All you will need is a heavy sandbag and fence. I use a fence at a local park. You can find a fence at any baseball or football field. This exercise is similar to Sandbag Loading except you will "load" the bag to the other side of the fence. You will then do whatever is necessary to scale the fence. As soon as you land, pick the bag up and throw it back over the fence. In the illustration below, I begin with my left foot closest to the fence. After jumping the fence, I would continue by throwing the bag back over with my right foot closest to the fence. Throw to your left, then jump, then throw the bag to your right, and continue back and forth…

This exercise is much more difficult than Sandbag Loading. Your legs will fill with lactic acid as you jump back and forth over the fence. You can perform this exercise for sets of 20-30 jumps, or one extended session of 50 consecutive fence jumps.

Perform this exercise at the end of your workout (or alone as a complete conditioning routine). Fence Jumping will wipe you out.

Try this exercise!

If you do not have access to a fence for Sandbag Fence Jumping or a platform for Sandbag Loading, you can experience similar benefits with Sandbag Throwing…

Sandbag Throwing
Grab your sandbag and throw it as far as possible. Begin by throwing to your left. Hurry to the bag and throw it back in the opposite direction, this time to your right.

Sandbag throwing is excellent for full-body strength and explosive power. Maintain a fast pace to maximize the conditioning benefit. Combat takes place at warp speed. To prepare for combat, you must train with the same speed and intensity!

Side-to-Side Loading – This exercise will strengthen many of the muscles used when loading and throwing the sandbag. You can perform this exercise indoors. Stand with a heavy sandbag on your side. You will bend at the knees, turning towards the bag. Grab the bag and forcefully pick it up towards the chest. The bag must past the height of your waist. Pivot with the hips, while turning on the balls of the feet. As soon as the bag touches the floor (Step 3), immediately reverse the motion. This exercise is similar to the Deadlift Twist from page 42. The difference is that during Side-to-Side Loading, you are moving back and forth as fast as possible, while lifting the bag up towards the chest. Side-to-Side loading emphasizes conditioning and power development, while the Deadlift Twist targets the core, without the ballistic element of Side-to-Side Loading.

Keep a **fast pace** with this exercise. This movement will develop awesome rotational strength.

Bobbing and Weaving – All “inside fighters” can benefit from this drill. Bobbing and weaving is quite fatiguing. Former Heavyweight champion Joe Frazier fought at a relentless pace, constantly weaving under punches, countering with devastating left hooks. Much of Frazier’s success originated from his unyielding pace. He constantly came forward, applying pressure throughout the bout. If you plan to fight with this style, your legs must be prepared to accommodate the workload.

Hold a sandbag close to your chest while bobbing and weaving under a rope. Bob and weave back and forth under the rope. If you are training inside a ring, you can tie a pair of hand wraps across the ropes. Bob and weave under the wraps. I recommend performing this drill for time. Start with one or 2-minute rounds. You will not need a full 3-minute round when using a heavy sandbag. After a few 2-minute rounds, your legs will be on fire. Within a few weeks, you will be able to bob and weave at a furious pace, round after round.

A Brutal Combination

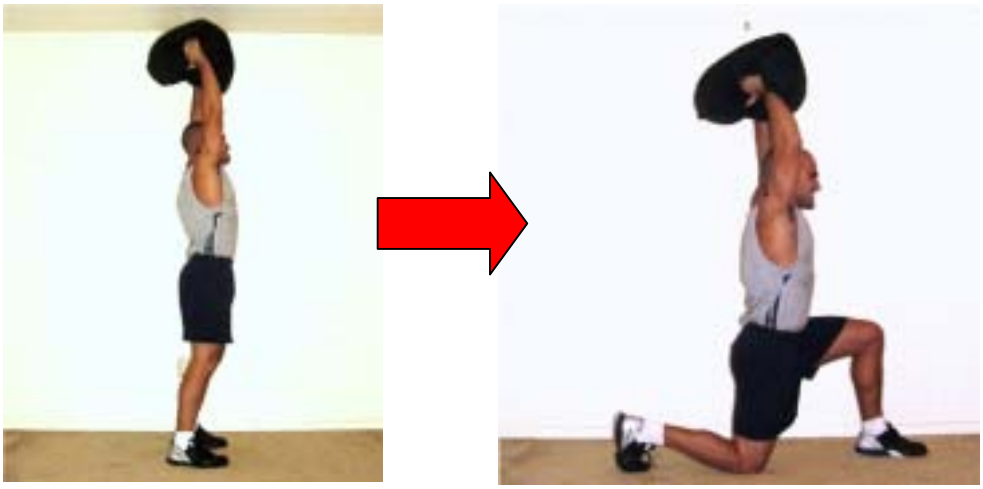
As a fighter, you have several training objectives. You may not always have time for a complete strength and conditioning routine.

When you find yourself strapped for time, I recommend integrating the “best of the best”. The exercise combination listed next will improve strength, anaerobic endurance, and power in no time. Within ten minutes, you will have achieved more than most people accomplish in one hour of training.

I warn you, this exercise combo is an ass kicker…

25 Repetition Roulette

Burpees + Clean and Press + Overhead Lunge



- Perform a complete Burpee with a sandbag placed directly in front of you.
- Upon landing from the Burpee jump, immediately grab the sandbag.
- Clean the bag to your shoulders, and press it overhead.
- Perform a lunge with each leg while holding the bag overhead.
- Drop the bag back to the floor and proceed with another Burpee.
- Repeat the entire sequence without rest for 25 repetitions

When performing this combination exercise, your sandbag may be too heavy for the Overhead Lunge. You can either reduce the weight of your bag, or instead perform Zercher Lunges. You will be able to lunge much more weight with the Zercher variation.

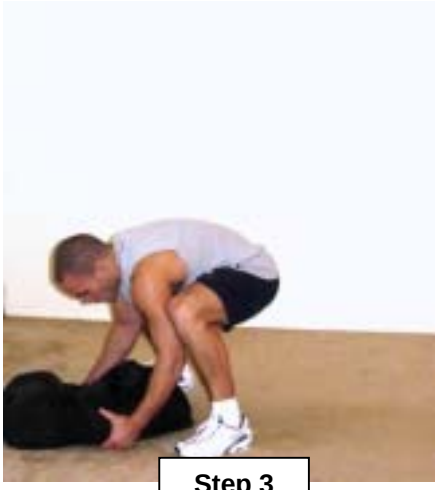
Work through this combination exercise at a brisk pace. There is no rest until you have completed all 25 repetitions. Try to reduce the time required to complete this routine with each attempt.

You can also perform this combination without the lunge (**Burpee + Clean and Press**). You will be able to use much more weight for this variation. These combination workouts are very intense. You should not perform these workouts more than 2-3 days per week. You can use this workout as a substitute for one of your strength training days, or as a finisher to any workout (strength or skill training).

Let's now look at two more intense combination exercises…

Step 1

Step 2



Step 3

Step 4

Burpee Shouldering – This exercise integrates Burpees with Sandbag Shouldering. Steps 1 and 2 begin as if you were performing a traditional Burpee. Upon kicking your feet back in Step 2, you will return to the starting position (Step 3), and immediately shoulder the sandbag to one side. Return the sandbag to the ground and continue with Step 1. In the illustration, I have shouldered the bag to my right shoulder. For my next repetition, I would shoulder the bag to my left. Work both sides evenly.

Burpee Shouldering is one of the most effective and intense exercises that you can perform. I recommend

using a heavy sandbag for this exercise. Start with 100 pounds and increase the weight when possible. This exercise can form an entire workout on days when time is limited, or can be used in conjunction with a more complete routine. Now let's look at **Extreme Burpee Shouldering**…

Step 1

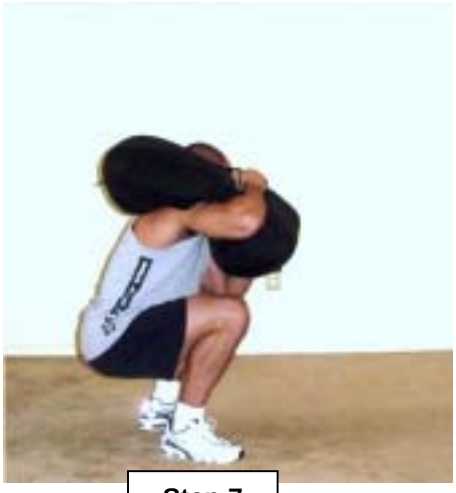
Step 2

Step 3

Step 4

Step 5

Step 6



Step 7

For this movement, Steps 1-4 are identical to Burpee Shouldering. Once the sandbag is shouldered, you will perform a deep squat. From the squat position, you will turn around 180 degrees (Steps 5-7). You will turn **from the squat position**, stepping in the direction of the bag. For example, in Step 5, the bag is on my right shoulder. I turn (Steps 6-7) towards my right, until I am facing the opposite direction. From Step 7, you will return the bag to the ground, and begin again with Step 1. For my 2nd repetition, I will shoulder the bag to my left, reversing the direction of the movement. Continue back and forth.

Extreme Burpee Shouldering is one of the most intense total body exercises that you can perform. This exercise will strengthen the entire body. The steps you take from the squat position will resemble that of a duck walk. The added weight of the sandbag will blast your legs, while challenging the core. I highly recommend this exercise. You will not find any fitness gadgets that can match the intensity of this movement.

Sledgehammer Training

Thus far, I have discussed non-weighted GPP, along with a unique form of sandbag conditioning. Let's now shift our attention to one of the most effective forms of weighted GPP…

The Sledgehammer!

The sledgehammer is an excellent, inexpensive conditioning tool. Regular use will dramatically increase rotational strength throughout the trunk and core. Sledgehammer swinging will strengthen many of the muscles used when punching. Boxers have been swinging the sledgehammer for years.

Recently, sledgehammer training has reemerged among many strength and conditioning coaches.

Why the recent reemergence of sledgehammer training?

Simple answer... Sledgehammer training works. Sledgehammer swinging is an excellent anaerobic strength workout. The sledge will improve work capacity, strengthen the trunk, develop valuable motor unit pathways, and provide one of the most intense grip training sessions you have ever experienced.

I highly recommend the sledgehammer for all combat athletes. Sledgehammer training will undoubtedly improve your ability to maintain explosive power, round after round.

Purchasing Your Sledgehammer

Sledgehammers are available in a variety of sizes. Most hardware stores will carry 8, 10, 12, and 16-pound sledgehammers. The average price is $2 per pound. I purchased a 10-pound sledge for $20 and a 16-pound sledge for $30. You can buy a more expensive model, but it is not necessary. I have used my $30 version for the past 2 years without any problems. Sledgehammers are designed for rugged use. Smashing a rubber tire will not pose any problems.

I recommend starting with a 10-pound sledgehammer. Do not make the mistake of starting with the largest sledge that you can find. Sledgehammer training is much more difficult than it appears. Make no mistake about it, you can achieve a tremendous workout with a 10-pound sledgehammer. Remember, we are using the sledgehammer as a conditioning tool. The best drills that you can perform require NONSTOP swinging for an entire 2 or 3-minute round. You need to swing FAST throughout each drill. If you start with too heavy a sledge, you will have difficulty completing the drills. Your swings will become slower, and less frequent, minimizing the training effect.

Swing the sledge as if you were throwing punches. You want to maximize the total number of sledgehammer swings during each training session. For example, suppose you are swinging the sledgehammer for 3-minute rounds. I would prefer to see you swing the sledgehammer for 200 explosive swings, as opposed to 50 slow paced swings. To be fast, you must train fast! Sledgehammer training is no exception.

Sledgehammer swinging will work muscles that you are not accustomed to training. Once you become proficient with the 10-pound sledgehammer, you can progress to a 12 and 16-pound sledge. You can integrate the 10 and 16-pound sledgehammer into one workout. For example, you can perform three rounds (3 minute rounds - 1 minute of rest between rounds) with the 16-pound sledgehammer, and then switch to the 10-pound sledge for three more rounds, with only 30 seconds of rest between rounds.

Sledgehammer Training Example

Begin With 16-Pound Sledgehammer

- 3 x 3-minute rounds – 1-minute of rest between rounds

Finish With 10-Pound (or 12 pound) Sledgehammer

- 3 x 3-minute rounds – 30 seconds of rest between rounds

After three rounds with the 16-pound sledgehammer, you will become fatigued. By switching to the 10-pound sledge, you can perform additional rounds, without sacrificing speed. You will benefit much more by switching to a lighter sledge, rather than struggling through sloppy swings with the 16-pound sledge. Leave your ego at home.

With consistent practice, you will blast through several 3-minute rounds with the 16-pound sledgehammer.

Smashing A Large Tire

You will need a large tire to absorb each sledgehammer swing. I recommend using the largest tire that you can find. Larger tires are more suitable for the repeated abuse that you will inflict with a 16-pound sledgehammer. A large tire will minimize the recoil of each swing. Larger tires also tend to be harder.

When you strike the tire, you can expect the sledge to bounce back at you upon impact. Harder tires will reduce the bounce. With a hard tire, the sledge will only bounce a few inches into the air after impact.

The bouncing nature of the tire will strengthen the wrists and forearms. After each tire strike, your wrists will tense up to stabilize the sledgehammer. You must be careful when striking the tire. If you do not tense the wrists upon impact, the sledgehammer may violently twist to one side. Your forearms and wrists should stabilize the sledgehammer as it strikes the tire. Your forearms and grip will dramatically increase in strength after training with the sledgehammer. You can expect a pair of Popeye forearms after a few sledge-swinging sessions.

Finding A Tire

You can find a used tire free. Most tire dealers have old tires, which are no longer suitable for driving. The dealer must pay to dispose of the tires. They will be more than eager for you to haul the tire away free. Find a shop that supplies large tires for trucks and tractors. Tractors use huge tires that are perfect for sledgehammer training.

While writing this book, I visited a tire shop in search of a few used tires awaiting disposal. As I entered the store's parking lot, I noticed at least 50 old tires piled by the dumpster. I spoke with the store's owner who was happy for me to haul off the remaining tractor tires. These tires sell for hundreds (if not thousands) of dollars when purchased new. They are extremely heavy, and expensive to discard. I filled my truck with three tires at no cost.

The neighbors may not understand your interest in used tractor tires, but that makes it even more fun. You can expect some unusual looks while smashing away with your handy sledgehammer.

Training With The Sledge

Once you obtain a good tire and sledgehammer, you are ready for some of the most intense workouts that you will ever experience. When training with the sledge, you can swing a specific number of repetitions (ex. 100 reps), or pattern your swinging around specific intervals (ex. 3-minute rounds). If you are a competitive fighter, I recommend training with intervals. You should pattern your conditioning program around the actual work-to-rest ratios used in competition. If you fight three-minute rounds, you can swing the sledgehammer for three-minute intervals.

Diagonal Swing – There are a few swinging variations that you can incorporate into your workout. With the diagonal swing, you will stand approximately 1-2 feet from the tire. In the illustration below, I am swinging the sledge from my right side. The hammer starts on my right side, and comes across my body diagonally until striking the tire. I recommend striking the tire in the center, against the near side of the tire (the side closest to you).

Step 1 Step 2 Step 3

To swing the hammer, one hand will remain stationary at the bottom of the handle. In Step 1, this is my left hand. The sledge starts on my right side, and travels across my body. My right hand slides down the sledge, away from the stationary hand as it is loaded behind my right shoulder. The hand then slides back towards the stationary hand during the downward motion. As you can see in Step 3, both hands are touching, at the end of the handle.

When you position yourself behind the tire, you should assume a staggered stance, with one foot slightly in front of the other. In the illustration, you can see my left foot is closest to the tire (while swinging from the right side). This stance allows me to generate more hip action on the downward portion of the swing. My hips pivot violently as the sledgehammer descends. You can generate even more power by pivoting on the balls of the feet. With this style of swinging, you will be able to handle a heavy sledgehammer.

Begin by swinging from the right side for 10 reps, then swing from your left side for 10 reps. When swinging from left to right, your right foot will be closest to the tire. Continue to alternate sides every 10 swings (10 right, 10 left, etc.).

It will feel natural to start the sledgehammer from your dominant side. For example, I am right handed, so it is natural for me to swing from right to left. It may feel awkward to swing the sledgehammer from your weak side. One of the benefits of sledgehammer training is its ability to even out your left and right sides. You will become more coordinated with your non-dominant hand.

Combat athletes require ambidextrous coordination. Consider a right-handed boxer who fights from the traditional stance (left foot in front). This boxer will jab with his left hand (non-dominant side). A good boxer will throw his jab more frequently than any other punch. The jab is the single most important punch in boxing. A good boxer can win rounds with the jab alone. To develop a crisp, whip-like jab, you will require coordination from your non-dominant side.

Your coordination must be similar to the basketball player who can dribble with both hands. Do not become frustrated if the sledgehammer feels awkward from one side. After a few sessions, you will notice tremendous improvements from your non-dominant side.

Vertical Swing – You can also swing the sledgehammer straight down, directly in front of you. For this variation, both hands will remain stationary at the bottom of the sledgehammer handle. You will quickly notice that this variation is difficult with a heavy sledgehammer. You should start with a 10-pound sledge for vertical swinging, saving the 16-pound sledge for diagonal swinging.

During the vertical swing, you should maintain a shoulder width stance, with parallel feet. Alternate your hand position every 10 swings. Below I have illustrated the vertical swing with an ax. Ax swinging is an excellent exercise made popular by many boxing legends. Former heavyweight champion Joe Louis often swung an ax when preparing to fight. The ax is much lighter than the sledgehammer. You can maintain a much faster pace.

As you can see, my hands remain stationary throughout the swing. If you plan to use an ax, you will need a large log. You should lay the log on its side when swinging the ax.

I highly recommend ax swinging and sledgehammer training. The disadvantage of ax swinging is the mess that you must clean afterwards. Each contact with the ax will propel wood chips in all directions. Despite the mess, you will take great pride watching the log slowly chip away from your relentless attack.

Do not write off the value of ax swinging because of it is lighter weight. You will maintain a much higher rate of swinging when using the ax. You can swing the ax at a relentless pace, which is excellent for anaerobic conditioning. The ax also provides much needed variety. I have been swinging an ax for over ten years. I began swinging a sledgehammer six years ago. Both tools are inexpensive and effective.

Let's summarize each…

Ax Training

- Less expensive than a sledgehammer
- Requires a large log for swinging
- Requires clean up after each training session
- Faster swinging (more repetitions)

Sledgehammer Training

- More expensive than an ax
- Several sizes available to modify intensity
- Requires a large tire – the tire may be easier to locate than a large log
- No cleanup necessary
- More power required for each swing

Keep It Simple

In my opinion, vertical and diagonal swinging are the two most effective sledgehammer variations. Horizontal swinging is a third option you may consider. You will mount your tire against a wall so it lies almost vertical. You can then perform a horizontal swing, which resembles that of a baseball bat swing. This variation is very difficult. You will require a much lighter sledge.

Horizontal swinging is effective for rotational strength development. Unfortunately, it is the least convenient form of swinging. To swing horizontally, you must mount the tire against a wall. Your house is usually not a viable tire mount. Each swing will rip the siding apart from your home. Fortunately, you can train with vertical and diagonal swings anywhere. Bring your tire to an open field, and you are ready to train. No need for any fancy contraptions.

As an athlete, you have several training objectives. Keep your sledgehammer training straightforward. Do not complicate the process by creating elaborate

swinging techniques. Stick with the basic movements. The vertical and diagonal swings can be conveniently performed anywhere.

Getting Started

If sledgehammer training is new to you, I recommend starting with 2-minute rounds of continuous swinging.

Beginner Workout

- 4 x 2-minute rounds – 1-minute of rest between rounds

You should attempt to increase the number of swings performed during each session. For example, if you average 80 swings in your first 2-minute session, you should strive for 100 or 120 swings after a few weeks of training.

Eventually, you can reduce the rest between rounds to 30 seconds. When you can comfortably perform 4 rounds with 30-second rest periods, you should increase the length of each round to 3-minutes. You can also begin using a heavier sledge.

Advanced Workout

- 4 x 3-minute rounds – 30 seconds of rest between rounds

When you can swing the 16-pound sledgehammer for 6 x 3-minute rounds, you are making excellent progress. The “average” person would collapse in a heap of sweat (and vomit) after attempting 6 rounds with the sledgehammer.

Master Workout

- 6 x 3-minute rounds (16-pound sledge) – 30 seconds of rest between rounds

When training with the sledgehammer, it is always a good idea to warm-up with your lightest sledge. You can then proceed through a few rounds with a heavier sledgehammer. For example, after warming up, you can start with 4 rounds of diagonal swinging using your 16-pound sledge. After 4 rounds, your heart will be pumping. At that point, you can switch to vertical swinging, this time using the 10-pound sledgehammer. Vertical swinging is more difficult. You will not be able to handle as much weight with this variation.

To summarize, begin your newfound sledgehammer program with a 10-pound sledge. When the 10-pound sledgehammer no longer poses a sweat-drenching challenge, you can proceed to the 16-pound sledge. Eventually, you can integrate both weights into your workout. You will never “outgrow” the 10-pound sledge. After a few rounds with the 16-pounder, the 10-pound sledge will be a perfect substitute to maintain the speed and intensity of your workout.

A Non Contact Option

In addition to conditioning, you can use the sledgehammer as an excellent forearm and wrist strengthener.


Step 1


Step 2


Step 3


Step 4


Step 5

Swing the sledge vertically, stopping just short of the floor (Step 4). Do not allow the sledge to touch the floor. Immediately reverse the motion, returning the sledge back overhead (Step 1). The hands should remain stationary throughout this movement.

In the illustration, I am swinging a 16-pound sledgehammer indoors without touching the ground. This exercise is sure to challenge your wrist strength. I recommend a 10-pound sledge until you become comfortable with the movement. You will not find many exercises that are as effective at strengthening the forearms and wrists.

More Weighted GPP

Thus far, our focus has been on low-budget, high intensity variations of GPP. We started with non-weighted bodyweight style GPP (perhaps the most gut-

wrenching version of all). I then discussed sandbag style conditioning and sledgehammer training.

Your neighbors have seen you throwing a sandbag into the air and beating a tire with a 16-pound sledgehammer. Let's continue to peak their curiosity with more "unusual" versions of GPP.

Wheelbarrow Training

Wheelbarrow training will really have the neighbors wondering if you are mentally sane…

As a youngster, my boxing coach often brought me to his home to assist with yard work. I would chop wood, rake leaves, shovel snow, and haul loads in the wheelbarrow. I worked in his yard each day after school. When I finished the work, we would head to the boxing gym to train.

One day, I was instructed to load the wheelbarrow with dirt and rocks. I then hauled it down the road to his neighbor's backyard. My back, shoulders, and arms burned as I hauled the load down the road.

I was puzzled why his neighbor wanted the dirt in his backyard. It did not make sense.

The next afternoon, my trainer asked me to shovel the dirt up from his neighbor's yard, and haul it back with the wheelbarrow. As a young teen, I could no longer refrain. I was scheduled to spar that evening and did not want to waste my time strolling around the neighborhood with a wheelbarrow full of dirt.

"*All of this back and forth nonsense is wearing me out*!"

He looked at me, smiled, and responded,

"*That is the point. Now hurry up because we need to get to the gym."*

For months, I had been struggling through "yard-based" GPP without knowing it.

More Variety

The wheelbarrow is a perfect addition to any weighted GPP program. Variety is imperative when training GPP. A constant dose of variety prevents adaptation to a particular movement.

The wheelbarrow is just one of many variations to add to your weighted GPP schedule. Walking with a heavy wheelbarrow is excellent for the hands, arms, back, shoulders, legs, and abdominals. You will feel every muscle in your body working with this seemingly basic form of conditioning.

In Case You Were Interested… Chuko Liang of China is credited as the inventor of the wheelbarrow. The original wheelbarrow was used to transport supplies to injured soldiers. Chuko Liang passed away in the year 234 A.D. The benefits of wheelbarrow walking have existed for almost 2000 years!

Anyone who has worked with a wheelbarrow appreciates its intensity. Unfortunately, most members of our society associate physical labor with the black plague. Our society is dependent on technology and automation. Our children sit around all day playing video games. Twenty years ago, boxing gyms were overcrowded. There were not enough trainers to work with all the fighters.

Today, there are three heavy bags for every fighter. When I mention wheelbarrow training, youngsters write me off as crazy. They have never had to haul a heavy load, or work an honest day of physical labor. They are too busy watching television. When you mention feeling sore from a workout, they mention that their ass is sore from sitting down all day.

Go to a local park or playground and you will find empty monkey bars and overgrown baseball fields. Let's face it, our population is overweight and out of shape. Go to the grocery store and look around. You will find a group of obese men and women crowded around the diet pill isle. Everyone wants a quick fix. They run from hard work. They would not know what a wheelbarrow was if it hit them in the face!

Well forget the lazy majority. Roll up your sleeves, get your hands dirty, and grab a wheelbarrow…

Getting Started

You can purchase a quality steel wheelbarrow at any hardware store. Your shopping list now includes a wheelbarrow and at least one sledgehammer. You can find both items at the same store. Most people purchase these tools for home improvement, you are purchasing these items for personal improvement.

Once you purchase the wheelbarrow, you must add weight to the bucket. You can use almost anything to weigh the wheelbarrow down. I recommend starting with a heavy sandbag. You can also add weights. A few 45-pound plates and a sandbag should suffice. I recommend starting with 150-200 pounds, and working up to 300 pounds or more.

Save wheelbarrow training for after your workout, or on an off day from the gym. The wheelbarrow is a great finisher to any workout.

Your first session with the wheelbarrow will be more difficult than you anticipate. The wheelbarrow will challenge the entire body. Your lower back will quickly strengthen. These muscles will be forced to balance and support the weight as you walk. Meanwhile, the hands and forearms will strain to hold onto the handles. These muscles will remain in isometric contraction throughout your wheelbarrow journey.

Where To Train

You can use the wheelbarrow in the yard, on the road, or even at a 400-meter track. Have no fear, your wheelbarrow will not discriminate between various terrains.

Pushing the wheelbarrow on grass is much more difficult than a nicely paved road or sidewalk. When walking the wheelbarrow in the grass, you will contend with bumps, ruts, mud, rocks, sticks, and an occasional dog dropping. The “natural” landscape will force your stabilizer muscles to work overtime. You will feel the muscles of your low back working to balance the load.

Pushing the wheelbarrow through wet grass is even more challenging. The added friction from wet ground will cause the wheelbarrow wheel to sink. This can make for a strenuous training session, but can ruin your yard. If you wish to train on wet ground, I recommend using a local park or schoolyard.

You can also take your wheelbarrow for a stroll in the neighborhood. Load up the wheelbarrow and head down the road. You will surely attract some strange looks from the neighbors. You can either walk the wheelbarrow for distance or time.

For example, you could walk the wheelbarrow for 1-mile. Record the time required to cover the mile. You can then work to reduce your time. Another option is to walk for time. Start with 10 minutes, and gradually work your way up to 30 minutes or more.

You will be surprised at the difficulty of wheelbarrow walking. Your forearms will feel like they are on fire. Working through this fatigue will pay huge dividends. Challenge yourself to continue. Strive to improve your distance (or time) during each workout.

For an added challenge, you can walk the wheelbarrow on inclined terrain. Be careful when walking up hills. You may succeed at walking uphill, but you must also return down the hill. Hold on tight to prevent the wheelbarrow from spiraling out of control. An "untamed" wheelbarrow can cause an ugly scene with oncoming traffic. If you train with hills, start with a light load. Build yourself up gradually.

Eventually, you can add a moderate gait to your wheelbarrow sessions. This is extremely strenuous, but excellent for total body conditioning.

Relax, Relax, Relax!

When fatigue sets in, you may be inclined to tense up. The weight of the wheelbarrow becomes heavy, so you squeeze the hands to control the load. Do not make this mistake.

Several well-conditioned fighters run out of gas after one round of sparring. What causes this phenomenon? How can such a well-conditioned athlete run out of gas within 3 minutes of action?

The answer is simple. Many fighters tense up during the heat of battle. They begin to circle the ring with a full-body isometric contraction. These athletes are often described as fighting "tight". They are not relaxed inside the ring. They try to throw every punch as hard as possible. The muscles never have a chance to rest. The entire body is tensed throughout the fight.

When you apply tension to the muscles, they will fatigue. World-class fighters know how to relax during competition. Do not mistake muscular tension with "fighting hard". Just because you are relaxed, does not mean that you are throwing soft punches. On the contrary, you are faster and more fluid in your actions. By relaxing, you allow the muscles to explode at maximum speed. You become faster, more elusive, and less fatigued.

Many boxers can hit the heavy bag at a relentless pace without fatigue. After sparring 3 rounds, they look like they have been in the ring for a 15-round world championship bout. When a fighter hits the bag, he stays relaxed. He has no concern of incoming punches. He is relaxed and able to throw hard punches, round after round. When he spars, he unconsciously tenses the body in response to his opponent's offensive attack. Holding a muscular contraction for an entire round is physically exhausting. After just three rounds of sparring, the fighter struggles to hold his gloves up.

There are two ways to relax as a fighter. First, you need experience inside the ring. No bag can replicate the physical and mental pressure of fighting inside the ring.

Second, you can become more relaxed by training TO RELAX. How do you train to relax? Great question…

Train with a wheelbarrow! This may not make sense at first, but consider the following… When you walk with a wheelbarrow, you will tense the arms, shoulders and back. This happens unconsciously as your body attempts to stabilize the load. If you have ever tipped a heavy wheelbarrow load, you are aware of the low back pain that can occur. Your body recognizes this danger so assumes the task of balance and stabilization.

When walking with the wheelbarrow, take a moment to observe your forearms. They will contract throughout the wheelbarrow session. This muscular tension quickly fatigues the entire body. After a few minutes, the wheelbarrow becomes unbearable.

One of the best ways to prevent fatigue is by relaxing the body throughout the training session. As you push the wheelbarrow, focus on relaxing the body. Breathe deep and maintain composure. As fatigue sets in, stay focused and avoid panic. When a fighter panics, he tenses up and loses physical and mental control.

Train yourself to maintain control even when faced with unbearable fatigue. Stay relaxed and keep walking the wheelbarrow. With each training session, you will gradually improve. Within a few weeks, you will have made dramatic improvements in work capacity and full-body muscular endurance. Your mental fortitude will reach newfound levels.

Combat athletes have unique requirements. You must be prepared to fight through fatigue. You must view adversity as an opportunity to prove your ability. You cannot succumb to fatigue. If you do not push yourself while training, how can you expect to respond when fatigued during combat? Do you think your "adrenaline" will save you? Take my advice, **it won't**.

Moving right along, let's shift our attention to one of the most intense conditioning tools ever created, the automobile…

Car Pushing

The automobile is one of the most revolutionary inventions in the history of transportation.

Teenagers dream about the day they can drive. Our highways are congested with automobiles.

Why walk when you can drive?

I know one reason. You are preparing to fight, and driving your car will not prepare you…

In 1771, Nicolas Joseph Fardier created a three-wheeled ancestor to today's automobile. The steam-powered vehicle plodded along at 2.3 mph. Years later, in 1889, Gottlieb Daimler and Wilhelm Maybach created a two-cyclinder gasoline engine with a 4-speed transmission. In 1901, automobiles began to be produced in quantity, starting with the Curved Dash Oldsmobile.

At the time, inventors were eager to create faster, more efficient automobiles. Makes sense right?

Wrong!

Warrior conditioning does not require gasoline. Perspiration is our fuel of choice!

Position yourself behind a vehicle. A partner will steer in neutral as you push the car down the road. You can perform this drill on low-traffic side roads or in a large parking lot. Your goal is to push the car as hard and fast as humanly possible. You will attempt to "sprint" against the resistance of the automobile's weight.

If you begin traveling downhill, your partner should ride the breaks to prevent the car from rolling away. This drill is best performed on flat land, or against a slight incline.

Suppose you are pushing the car at a school parking lot that has a slight incline. You should push the car uphill as hard as possible. Your driver can then return the vehicle to the starting position. You should only push the car uphill, rather

than pushing the car back down the hill. As the driver returns to the starting position, you can sprint after the car and prepare for another incline push.

I recommend pushing the car for explosive bursts of 50-100 meters. Another option is to push the car for distance. This version will improve muscular endurance. Explosive sprints will target the anaerobic energy systems. Both styles of car pushing are recommended and effective.

Warrior Conditioning Summary

I have presented several conditioning movements. Examples include non-weighted GPP, sandbag conditioning (several variations), sledgehammer and ax swinging, wheelbarrow walking, and car pushing. Later, I will discuss strategies for constructing a weekly training program.

It is not feasible to train with each exercise at once. Instead, you should incorporate variety by mixing and matching various conditioning drills. Your body will adapt in time, so keep the muscles guessing by training with different movements. It is best to reap the benefits of ten exercises, rather than focusing all of your energy towards one. By performing the conditioning drills from this chapter, you will dramatically improve work capacity and muscular endurance.

As a fighter, you should never lose a bout because of poor conditioning. Always enter the ring prepared for battle. Your training program must mimic the intensity of competition. Never underestimate your opponent. Many fighters enter the ring uncertain about their condition. Do not make this mistake. Enter the ring confident that NO ONE has trained with your intensity.

Are you a contender or a pretender? Are you an action taker, or an action faker?

Do not answer these questions one week before your fight. The desire to succeed must live within you, before, during, and after the fight. You cannot turn desire on and off like a light switch. You must keep the flame burning within, each day that you train, each day that you live.

WARRIOR RUNNING

"Once we accept our limits, we go beyond them." – Brendan Francis

Roadwork has always played an integral role in combat conditioning. We have all "run" when preparing to fight. Unfortunately, many fighters are running the wrong way. By training with slow paced, distance sessions, these fighters are neglecting the anaerobic energy systems.

Question Break: Why have you included a chapter that is dedicated to running?

Answer: Running is an excellent conditioning exercise. A proper roadwork program is one of the most effective forms of anaerobic conditioning. There is a huge difference between a slow paced jog and fast paced interval workout. Interval running is intense, time efficient, and effective. Intervals are excellent for conditioning the two anaerobic energy systems (ATP-PC and Glycolytic).

In addition to the obvious conditioning benefit, interval training will raise your metabolic rate for several hours after exercise. In laymen's terms, this means that your metabolism will remain elevated, meaning you will burn fat throughout the day. Intervals are excellent for fat loss, sport-specific conditioning, and fast twitch muscle fiber recruitment. You will become more explosive, for longer periods. Interval training will blow away any long distance roadwork program you have ever performed.

Common Distances

A proper interval program must incorporate variety. Common distances include 800, 600, 400, 200, and 100 meters. Below I have illustrated the energy system contributions associated with four common running distances.

Distance	Aerobic Contribution	Anaerobic Contribution
200 meter run	29%	71%
400 meter run	43%	57%
800 meter run	66%	34%
1500 meter run	84%	16%

These figures come from the Med Sci Sports Exerc., Vol 33, No. 1 2001. These statistics were provided in a report entitled *Energy system contribution during 200- to 1500-m running in highly trained athletes*, provided by MR Spencer and PB Gastin.

These figures provide valuable insight for our interval program.

1. As the interval distance increases, the anaerobic contribution decreases. The event becomes increasingly aerobic.

2. The body's energy systems are not mutually exclusive. The aerobic and anaerobic systems work together. Even during the 200-meter sprint, there is a significant contribution from the aerobic system. As a complete athlete, you cannot neglect the aerobic energy system.

Let's now review some common distances, and the efforts associated with each.

800 Meters – 800-meter intervals are suitable for standup fighters such as boxers and kickboxers. This distance is particularly effective for fighters who are on their feet for several rounds (8, 10, or 12). When performing 800-meter interval runs, you should maintain a pace that is between a sprint and a jog. The pace should be as fast as you can maintain throughout the duration of the interval. I always recommend finishing the last 100 meters of the interval with a near maximal effort.

600 Meters – 600-meter intervals are also excellent for standup fighters. You should maintain an intense pace throughout the interval.

400 Meters – 400-meter intervals are excellent for all fighters. Whether you fight on your feet (boxers) or on the ground (wrestlers), this is a perfect interval distance. You should maintain a "near-sprint" pace for each 400-meter interval.

200 Meters – Perform 200-meter intervals with all out intensity (full sprint). I highly recommend 200-meter intervals for all combat athletes. The energy demands of combat are almost identical to this interval.

Sample Routines

Each letter item represents an entire interval workout.

a) 5 x 800 meters – 1 minute rest between each
b) 6 x 600 meters – 1 minute rest between each
c) 8 x 400 meters – 1 minute rest between each
d) 10 x 200 meters – 30 second rest between each

You can also integrate several distances into one routine. For example, you can run 3 x 400 meters, then 4 x 200 meters, and finish with 5 x 100 meters.

*In the chapter entitled **Training Routines**, I have provided several routines.*

Always begin an interval session with an adequate warm-up, consisting of light jogging, jump rope, or similar activity. Interval workouts are best performed on a 400-meter track (or grass field) with proper running shoes. The softer surfaces will prevent discomfort.

Intensity is the key component of interval training. Intervals will leave you gasping for air, begging for a chance to collapse. It is important to work hard throughout the interval session.

Question Break: During the winter can I perform intervals indoors with equipment such as a stationary bike or jump rope?

Answer: In the chapter entitled **Training Routines**, I have provided a sample interval schedule that can be performed indoors. It is useful to incorporate variety into your interval program to prevent boredom and overuse injury. Interval training is best performed 2-5 days per week. Running intervals on 5 consecutive days will overtrain the legs. Variety can prevent overtraining. For example, Monday and Thursday could be dedicated to interval workouts on the track. You could then find two additional days in the week to perform intervals on the stationary bike, jump rope, or even the heavy bag. It is important to bring the "anaerobic theme" to the gym with you. By punching the heavy bag with all out intensity for 1-minute, you are performing "intervals" without taxing the legs. It is important to train the anaerobic energy systems regularly, without overtraining one particular muscle group.

Important Consideration…

Although I encourage variety, I also recommend a regular dose of interval running. Several athletes seek alternatives to interval running for one simple reason…

Intervals are difficult. Your legs will quickly fill with lactic acid. Make no mistake about it, interval running is not for the feint of heart. It is easy to fake your way through a machine-based interval session. On the track, there are no tension settings. Either you run hard, or you do not. As you run, adaptations take place inside your body. You learn to buffer lactic acid and perform with maximum exertion for extended periods. Most people who discredit the value of interval running are the same individuals who struggle with one lap around the track.

No one said this would be easy…

No matter the weather, I recommend at least two interval running sessions per week. I have run through the cold winters of New England my entire life. Cold weather is no excuse. Bundle up and get outside!

How bad do you want it?

Answer that question, and then decide whether or not you will run outside.

Intervals For Time

If you do not have access to a 400-meter track, you can run intervals for time (ex. 1-minute) as opposed to distance (400 meters).

For example, run for 1-minute at near-maximum intensity. Rest 1-minute and repeat 4-6 times.

Another option involves sprinting for 20-30 seconds, followed by 30-40 seconds of light jogging. You can repeat this cycle for 12 continuous minutes. Let's look at a sample routine:

- Sprint 20 seconds
- Jog 40 seconds
- Repeat for 6-12 intervals

When you can perform 12 intervals with a 20/40 sprint-to-jog ratio, you can begin working on 30/30 intervals.

- Sprint 30 seconds
- Jog 30 seconds
- Repeat for 6-12 intervals

You will be surprised at the intensity and effectiveness of this style of training. In just 12-minutes, you can complete an intense interval session. This form of interval running is often referred to as HIIT (High Intensity Interval Training).

Shorter Distance Sprints

Sprint training develops speed and power throughout the legs. Sprint training is intense, effective, and time efficient. A typical sprint workout will consist of 10 to 20 short sprints, each consisting of 100-meters or less. A wind sprint routine consists of sprinting a predetermined distance (for example 100 meters) and then jogging back to the starting line. You would continue this pattern without rest until the workout is complete:

- Sprint 100 meters
- Jog 100 meters (back to starting line)
- Repeat 10 times (10 x 100 meter sprint session)

Do not perform intense sprint workouts on consecutive days. Allow 48 hours of rest between sprint sessions. Sprinting on a daily basis can lead to overtraining.

Question Break: Should I ever run distances over one mile?

Answer: Interval training is clearly the superior form of roadwork. I do however believe that an occasional aerobic run should be included in a fighter's weekly schedule. Many "new-school" coaches are completely against aerobic running. In their minds, aerobic equates to "easy". This is not always true. Just because you are running more than 1-mile, does not mean that you should run at a leisurely pace. I preach a system of intensity. You should run with intensity, whether you sprint 100 meters, or run 2-miles.

The chart on page 123 illustrates that our aerobic system operates in the background during primarily anaerobic activities. A fighter can benefit from an occasional aerobic run, if performed at top speed. All fighters should run 1-mile in 7 minutes or less. I have seen 230-pound heavyweights achieve this goal. Lighter fighters should strive for a 6-minute mile.

If you are a stand up fighter, you will compete on your feet. Consider the boxer who fights 12 x 3-minute rounds. He boxes on his feet for 36 minutes. He throws a combination (anaerobic) and then regroups by moving around the ring (aerobic). This fighter can surely benefit from 1-2 aerobic runs per week.

I believe in a roadwork schedule that emphasizes anaerobic interval training, without neglecting the aerobic energy system. The new trend in the strength and conditioning world is to completely discredit aerobic running. I do not agree. Go run 1 or 2 miles as fast as possible. Time yourself and observe how you feel. Is it "easy" to bust your ass for 12 continuous minutes?

It is important to develop a foundation to build from. If you lack aerobic fitness, it will be difficult to maximize your anaerobic fitness. The anaerobic and aerobic energy systems are not mutually exclusive.

Fartlek

Fartlek is a Swedish term for “speed play”. Fartlek is perfect for your occasional aerobic running session. Fartlek running is less structured than interval running. Fartlek consists of random periods of exertion, followed by light jogging. For example, you will sprint as hard as possible, and then follow with a few minutes of light jogging. During a Fartlek workout, you will run hard, then jog, and continue at your own pace, without structure. You vary the distance of each sprint based on how you feel. Fartlek is excellent for general conditioning, without the rigid structure of an interval workout. I highly recommend Fartlek style running 1 day per week. Fartlek provides a physical and mental break from structured interval training.

Summary

Interval running and sprint work are excellent conditioning exercises. It is not enough to carry a heavy sandbag. You must also perform high-speed work.

High intensity running will train the energy systems used during combat. Your conditioning routine must target the anaerobic system, without overtraining any particular muscle group. Much of your skill training (ex. bag work, focus mitt punching) will target the upper body. Interval running allows the upper body to rest, while training the anaerobic energy systems to buffer lactic acid, thus teaching the body to work through fatigue.

Your conditioning routine must incorporate variety. Each form of conditioning provides unique benefits.

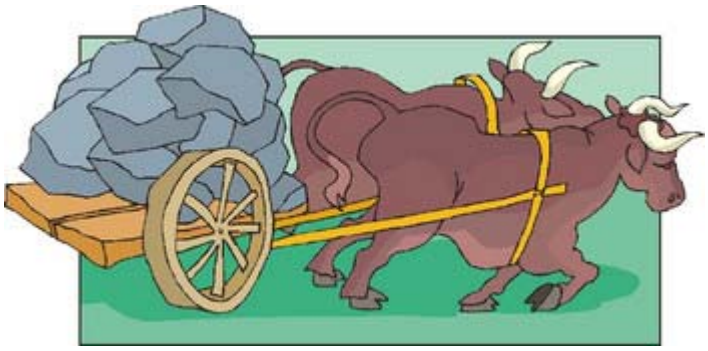
Find time to include interval running and sprint work in your weekly schedule. These workouts are among the most time efficient and effective that you will find.

There are no excuses to neglect interval training.

A Few Reminders

- Always begin your sprint and interval workouts with a sufficient warm-up. I recommend 8-12 minutes of moderate activity.
- Always conclude your session with a mild cool-down consisting of light jogging.
- Wear proper running shoes during interval or sprint training.
- If possible, run on soft surfaces such as grass or a 400-meter track.
- Allow at least one day of rest between intense interval workouts.
- Variety, variety, and more variety.

SLED DRAGGING



"Do not confuse motion with progress. A rocking horse keeps moving but does not make any progress."
– Alfred A Montapert

Let's continue our conditioning discussion with another "sandbag" friendly device, the sled. Sled dragging can increase work capacity and promote restoration. Many power lifters credit sled dragging with tremendous strength gains and reduced muscle soreness. As a fighter, you too can reap the benefits of weighted sled dragging.

The sled offers an inexpensive, convenient form of weighted GPP. You can train the entire body with a weighted sled.

Benefits of sled dragging include:

- Convenient, effective, and inexpensive
- Promotes restoration
- Improves work capacity
- Offers variety and is fun to use
- Strengthens the entire body

Getting Started

If dragging is new to you, I recommend building your own sled. You can easily construct a fully functional sled for less than $10. I have used a homemade version with great success. The homemade version that I recommend will take 5 minutes to construct. You have nothing to lose, unless you consider $10 and 5 minutes too great of an investment.

If you prefer to purchase a “real” sled, you will pay over $100. You can purchase a sled from many sports equipment suppliers, but be prepared to fork over a considerable amount of cash.

In the illustration to the right, you can see all of the equipment you need, a snow sled, a rope, and a belt. I purchased the snow sled at a toy store for $4. I drilled a hole on one side, to attach the rope. Certain exercises require holding the rope in your hands, while others require a belt around your waist. A weight lifting belt works fine, although I have used a regular leather belt.

You can also create straps to tie around the legs for various exercises such as Ankle Dragging. You can create the straps from common household items such as a dog collar and leash. I made my ankle straps from an old pair of boxing hand wraps.

I use a sandbag to provide weight to the sled.

More Sled Options

In addition to the snow sled, you can create a homemade version with an old tire. Tie a rope around the tire and drag it from its side. Place a piece of plywood underneath the tire. Your sandbag will sit inside the tire, atop the plywood, which acts as a platform. The plywood will prevent the sandbag from falling through the center of the tire. This option is convenient, but not as friendly to the grass as a snow sled. The weighted tire may rip apart the lawn.

Another option is to construct a sled from sheet metal. You can quickly weld together a fully functional sled. You can even attach a pipe to the sled, which can serve as a “barbell” for any weights that you add for resistance.

The options for homemade sled construction are endless.

I have tried several variations. I consider the plastic snow sled the most convenient and inexpensive option. The snow sled is designed to hold the weight of a grown man, so it is perfect for dragging your sandbag. The bottom of the sled is smooth, so it will not damage your lawn, and can even be dragged indoors.

Sled Dragging For Fighters?

Why should a fighter train with a weighted sled? After all, there are only so many hours each day. How can you find time to train with a sled?

Great questions!

I agree, there is only so much time available each day. Sled dragging should not replace your routine, but it can serve as a valuable addition to a vast training arsenal. I enjoy dragging the sled. You will benefit from a regular dose of weighted sled work.

It is not feasible to train with every form of weighted GPP in one day. For this reason, you must incorporate variety to foster a continuous training response. The sled is a great tool to include in your weighted GPP program.

Restoration and Strength/Conditioning

Sled dragging serves two primary purposes. First, it promotes restoration. If you drag to promote recovery, you will keep the weight light. Your goal is to induce blood flow to sore muscles.

Power lifters use the sled to promote restoration following intense lifting sessions. Sled dragging is particularly effective for restoration during an intense strength training season. Sled dragging does not contain eccentric motion. The eccentric motion of a lift is the "negative" work. For example, when you bench press a barbell, you first press the weight (concentric motion) and then lower the weight (eccentric motion). During the eccentric motion, the muscle undergoes resistance as it lengthens. Eccentric motion causes delayed onset muscle soreness (DOMS).

Sled dragging does not involve eccentric motion. It emphasizes concentric motion. During a concentric contraction, the muscle shortens under its own power. Concentric movements such as sled dragging induce blood flow to muscles without causing soreness.

Question Break: *But Ross, we are training for combat, not power lifting?*

Answer: I recognize and acknowledge the differences that exist between fighters and power lifters. The two sports require unique training programs. Despite obvious differences, a fighter can experience tremendous benefits from a sled dragging routine.

We will modify sled dragging to accommodate our specific training goals. A power lifter trains with the intention of maximizing various lifts. A fighter trains with the intention of improving his performance during combat.

Power lifters have more need for restoration. A power lifter focuses more time in the weight room than a fighter. You should not devote more than 2-3 days per week to strength training. Much of your time must be directed towards skill training and anaerobic endurance.

Fortunately, you can use the sled as an intense conditioning device. The sled is an excellent conditioning tool that can greatly increase work capacity, total-body strength, and muscular endurance. If you drag with the goal of strength and work capacity improvements, I recommend no more than two sessions per week. You will drag more weight, at a faster pace when training for work capacity. I personally find sled dragging to be one of the more "enjoyable" forms of conditioning, despite the intense nature of the work.

Advice: Balance heavy dragging with other forms of conditioning. If you drag heavy, you may want to ease off from hill sprinting and sandbag carrying/running.

Sprinting or Walking?

Many power lifters advise against sprinting with the sled. Meanwhile, many football players perform sprint drills while dragging a weighted sled.

Where does this leave the combat athlete? Is it safe to sprint with a weighted sled?

There are several opinions on this subject. The power lifting community advises against sprint work, while many conditioning coaches vote in favor of weighted sprint work.

Personally, I have sprinted with a weighted sled and enjoyed the results. Very few exercises tax the legs as much as weighted sprints. There is no denying the intensity of sprint-style sled work.

Sled sprinting does not make sense for a power lifter who is trying to maximize his squat and deadlift totals. The intense nature of sled sprinting will take away from the power lifter's weight routine. These athletes turn to the sled to improve GPP and/or foster restoration through low-impact movements. A fighter requires a unique form of conditioning.

Consider the sport of sled racing where dogs pull a sled for miles, over mountainous terrain. These dogs require tremendous stamina to drag the sled at such a fast pace for extended periods of time.

If used in moderation, sled sprinting offers tremendous benefits. Remember, we are not training to maximize weight lifting numbers. We are training to become more explosive athletes. This style of conditioning is intense and effective.

Football players sprint with the sled for a reason. These workouts develop awesome lower body power, particularly throughout the torso and hips.

What about sprint mechanics?

Another argument against sled sprinting is that it develops poor sprint mechanics. I disagree. I have integrated sled work with hill sprints and track workouts with no declines in running speed.

Do the athletes of the National Football League struggle with sprint mechanics?

No!

These players train with the sprint-style sled work and continue to amaze fans with the explosive, high-speed nature of the sport.

Furthermore, we are not training for Track and Field. We are training to develop explosive power and anaerobic endurance, to compliment the skills that we employ inside the ring.

If you question whether weighted sled work will alter sprint mechanics, I have an experiment for you to perform. Go find a group of Husky dogs that compete at sled dragging. Cook up a nice piece of steak and attach it to your ass. Go run by the dogs and observe how fast they sprint. I am willing to bet the dogs latch on to your ass in less than 10 seconds.

Sprinting with a sled will not harm you unless you overuse this style of training. Due to its intense nature, you should not perform sled sprints on a daily basis. You can however include 1-2 days of sled work per week.

I am not suggesting that sled dragging should replace your track workouts. Variety is always important. You can work a few weeks on hill sprinting, then shift your emphasis to interval work on the track. After a few weeks of track workouts, you can begin sled sprinting once per week. Never focus all of your energy towards one training style (hills, sprints, intervals). You can cycle between different forms of non-weighted and weighted GPP to foster continuous improvements. No conditioning drill is superior to all others. The body can adapt to any exercise. You must prevent adaptation by continuing to vary exercise selection. Sled dragging is just one of many options…

Sled Dragging Movements

Sled Sprinting - When sprinting with the sled, you must pay close attention to stride length to ensure adequate acceleration. It is important to stay low at the start to generate optimum power and speed. This form of sled training will force you to maintain proper technique, as you work to achieve maximum speed. These workouts are very intense. After a session of 10 sprints, you will be lying on the ground next to your sled.

You can begin sled sprinting with 50 pounds in the sled. The sprints should be short. I recommend 30-50 meters.

For example, you could sprint 8 x 50 meters with the sled, and then finish with 8 x 50 meters without the sled.

This workout is time efficient and intense.

If you prefer to walk with the sled, you should use more weight. You can use 100 pounds or more, dragging for much longer distances. Slower paced sled dragging is excellent for strength and GPP. The conditioning benefits are unique from those achieved while sprinting. When walking with the sled, you emphasize work capacity and strength, while sled sprints target anaerobic strength and power. Both techniques have merit.

Dragging Summary

- Dragging to emphasize restoration = Light load
- Sprint work with the sled = Light to moderate load
- Dragging to emphasize strength = Heavy load

Forward Dragging - Notice how the sandbag sits atop the sled. I have used a plastic snow sled. The sled has a rope attached. The rope is tied to a belt, which is around my waist. If you walk with the load, do so in an explosive manner. You can carry dumbbells in each hand for added difficulty.

If you sprint with the weight, stay low when accelerating to generate maximum power and speed.

Backward Dragging -
Bend the hips and knees and begin with deliberate steps backward. Move the arms in a running motion. It will not take long for the quads to feel this exercise. Once again, you can sprint or walk, depending on specific goals.

Step 1

Carioca Dragging – Stand with the feet shoulder width apart. Cross one foot in front of the other. Step laterally with the back foot to return to the beginning stance. Next cross your foot behind the other leg and again step laterally to the start position. Repeat this front and back crossover pattern.

Step 2

Be sure to work this exercise in both directions. You will not find a more effective exercise to strengthen the hips. Much of your kicking and punching power is generated from the hips and torso.

Carioca style running is effective with or without a sled.

Ankle Dragging – Ankle dragging is excellent for the hip flexors and hamstrings. In the illustration, I have tied two ankle attachments to the sled's rope. The straps are secured around each of my ankles. I created these ankle straps with a pair of boxing hand wraps. You can also use dog collars or rope to create sturdy ankle straps.

When dragging, pull the legs forward with a slight bend in the knees. Concentrate on dragging with the hip flexors and core. This is not a "conditioning" exercise, rather an excellent movement to strengthen weak points in the legs, hips, and abdominals.

Backward Ankle Dragging – Backward ankle dragging is excellent for the hip extensors and hamstrings.

You can also drag the sled **sideways** to work the hip adductors and abductors.

When dragging from the ankles, you will not be able to move nearly as much weight as when dragging from the waist. Start with 30-40 pounds in the sled.

As a fighter, most of your time with the sled will be dedicated to more power oriented movements such as weighted sprints, but an occasional day with less intense movements such as ankle dragging can be excellent for physical and mental restoration.

Bent Over, Behind The Knees Dragging – Bend over into a semi-squat position, with the rope held behind the knees. In the illustration, I have gripped the belt that I use for sled sprinting. From this stance, I walk forward, maintaining the semi-squat position.

This walking variation is excellent for the hamstrings. You can drag heavy for strength, or lighten the load for restoration. If you ever experience sore hamstrings from sprint training, this is an excellent exercise to induce blood flow to the legs.

Lunge Walking – Attach the sled's rope around your waist and proceed forward with lunge steps. Upon landing explode upwards and out. This is an excellent strength building exercise when performed with a heavy sled. I highly recommend all lunge variations.

Backward Lunge Walking – The backward lunge is also excellent when performed with a heavy sled.

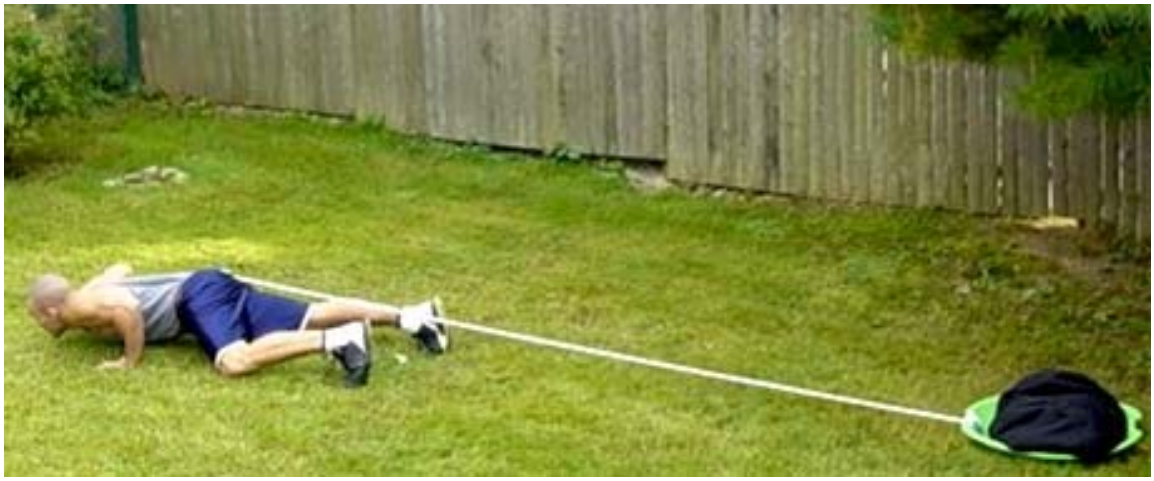
You can integrate forward and backward lunge walking to create an awesome lower body workout.

Animal Style Sled Dragging

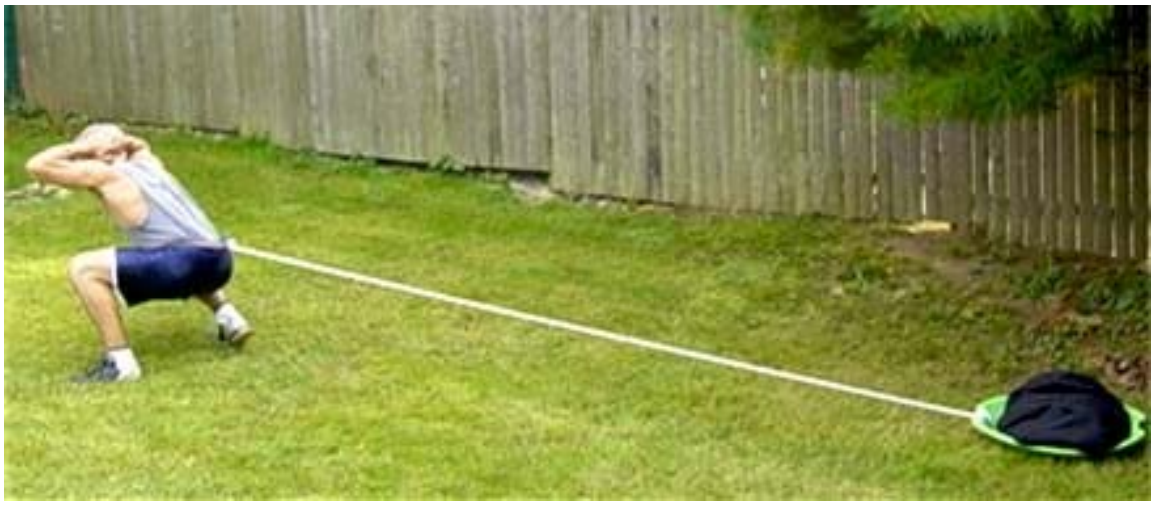
The following sled movements will provide a full-body strength and conditioning workout. I highly recommend animal style sled dragging.

Bear Crawl – Attach the sled around your waist. Walk forward on all fours like a bear. Move right hand and right foot, then left hand and left foot. You can use a heavy load to develop brute strength, or reduce the load to promote speed of movement.

Alligator Walk – Walk forward on all fours, keeping your chest as close to the ground as possible. Keep the elbow up while crawling forward. Move right hand and right foot, then left hand and left foot. This exercise is much more difficult than it appears. After 100 meters, you will be exhausted.



Duck Walk – From a squat position, hold the hands by your head and “waddle” forward like a duck. You will need a light load for this animal training variation. The duck walk with a weighted sled will blast the legs!



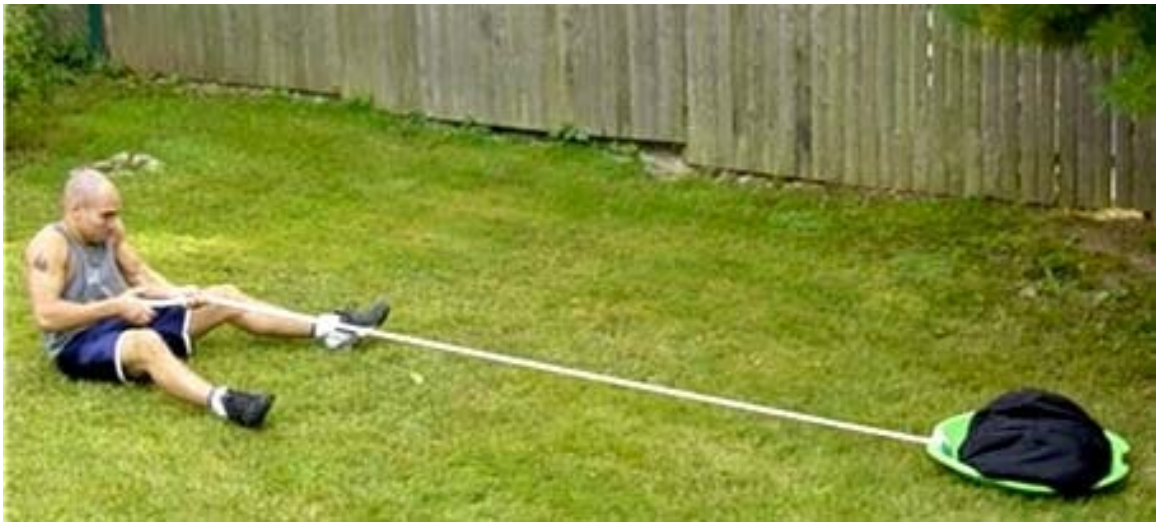
Crab Walk – Walk backwards on all fours with your stomach facing upward. Pay careful attention to where the rope hangs between the legs during this movement. Do not allow the sled to land a “low blow”.

These four animal movements can be used together for an awesome full-body workout. If you use all four movements, finish with the duck walk, as you will be weakest with this style of dragging. You will need to remove some weight for the duck walk.

Rope Pulling – Pulling the sled is excellent for the back, arms, shoulders, and core. This movement will blast the forearms.

Reel the sled in towards you by pulling hand over hand. Your feet will remain stationary until you have pulled the sled as close to your feet as possible. Once there is no more rope to pull, walk back until the rope becomes taut. Pull the sled again. Continue until you have "reeled" the sled in 10 or more times. Use a heavy sled for this movement.

Seated Sled Pull - Pulling the sled from a seated position is a much more difficult variation.



Lying Sled Pull – Lie face down and pull the sled towards you. This is the most difficult variation. These three pulling exercises are excellent strength movements.

Sled Twists – Place a heavy sandbag in your sled. Pivot the hips and swing the sled from one side of your body to the other. I have illustrated this exercise indoors.

You can shorten the length of the rope attachment to create a "living room friendly" sled. Sled Twists are awesome for rotational power throughout the hips. Drive with the legs and hips as you pivot from the balls of your feet. You should perform this exercise back and forth, in both directions. Use a heavy sandbag for this exercise. I recommend at least 100 pounds to prevent the bag from flying out of the sled after each repetition. This is an explosive exercise. You should attempt to "whip" the sled forward with each repetition that you perform…

Sled Conditioning Summary

Thus far, this chapter has emphasized strength and conditioning movements with the sled. You can integrate several of these exercises to form a complete training session. For example, you can begin with sled sprinting, and conclude with various animal style movements, lunge walking, and rope pulling. It will not take long to punish the body with a full-body sled workout. If you find yourself bored or unmotivated, I recommend an outdoor dragging session. These workouts are intense, effective, and enjoyable. Mix it up and have fun.

Restoration

The sled is also excellent for restoration. When training for restoration, you will lighten the load of the sled. These workouts are designed to induce blood flow to sore muscles. Restoration sessions must not be confused with conditioning workouts.

Restoration is defined as the act of putting “something” back into a former or original state.

During an intense training season, you may experience soreness from heavy strength training workouts or a grueling day of conditioning. Restoration involves the actions taken between training sessions to foster recovery. A restoration session with the sled can reduce soreness, improve quality of sleep, and encourage motivation.

Look at the definition listed above. These workouts are designed to restore the athlete to his (or her) original state. Suppose you endure an intense training session. You are tired and sore. You may lack motivation to train. Perhaps you are unable to sleep. Restoration workouts can bring you *back to your original state*.

Many athletes work hard in the gym, but fail to restore themselves between training sessions. These athletes are tired and mentally drained. They are guilty of one of two common mistakes:

1. Failure to include restoration style training
2. Over-intensifying the restoration session

The first mistake is obvious. The second is not. Many athletes recognize that sled dragging **can** be used to induce blood flow and foster restoration.

Sled dragging **can** also be used during an intense strength and conditioning session.

It is important to understand the difference between restoration and strength/conditioning. Sprinting with a weighted sled does not promote restoration. Mild dragging with a light sled does promote restoration.

Leave your ego at home when training for restoration. These workouts do not involve immense loads. When you drag too heavy or too long, you defeat the purpose of the restoration session.

Restoration Tips:

- Keep the load light
- Keep the training sessions brief
- Incorporate variety into your restoration sessions. Do not perform the same restoration movements during each session.

Many power lifters drag a weighted sled for restoration. These athletes train with tremendous amounts of weight and rely on restoration to foster recovery and motivation. Unfortunately, restoration is practically unheard of by combat athletes. Restoration can be particularly beneficial after an intense sandbag session

Perform restoration workouts a few hours after your training session. My experience shows that 4-6 hours works well. For example, suppose you conduct an intense lifting session in the morning. You can follow up with a restoration style workout later that afternoon. If you lift heavy at lunch, you can incorporate restoration during the evening.

If you cannot find time for a separate restoration session, I recommend using the sled at the end of your workout, or the morning after an intense weight training session. For example, if you wake up with sore legs from squatting, you can perform light dragging that morning to help alleviate soreness. Keep the weight light, and the session brief.

Combat athletes will not require as many restoration sessions per week as a power lifter. We have several training objectives, and only so much time. Use the sled when needed for restoration. I typically conduct a brief restoration session two days per week. Many power lifters drag the sled 6 days per week.

Combat athletes will not require as much time on the sled. We do not lift as heavy or as often. Power lifters place great stress against the central nervous system during frequent lifting sessions. They have more need for restoration. We do not live for the weight room, we use strength training to supplement our sport-specific routine.

Restoration Movements

There are many sled movements suitable for restoration. I highly recommend light dragging to restore the legs. You should integrate various forms of dragging. I commonly include forward dragging, backward dragging, and ankle dragging. I recommend dragging for trips of 50-75 meters when the goal is restoration. Anything beyond 75 meters may be too intense for restoration purposes.

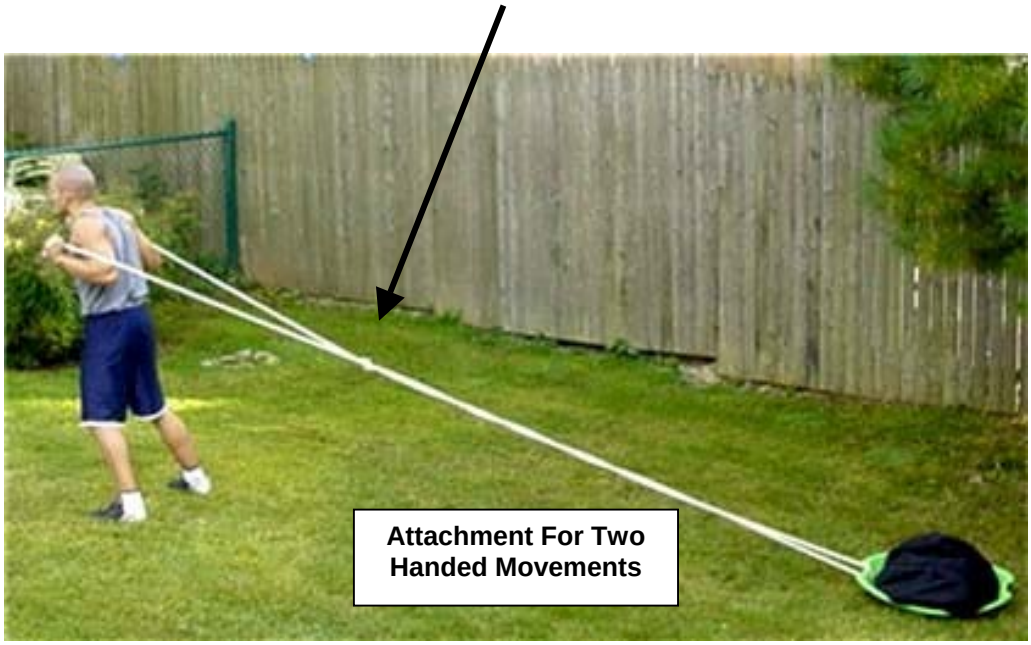
You can also use the sled for upper body restoration. If you are sore in the shoulders, arms, or chest, you can flush the muscles with blood by incorporating upper body sled work.

For these exercises, you will grip the rope with two hands. The rope will form the letter “T”. There are a few ways that you can achieve this objective. One option is to use your ankle strap attachments. Hold one attachment in each hand. Another option is to tie a knot in your rope so that it branches out to form two separate ends (“T”).

I use the latter approach. I have two rope attachments that I use for dragging. The first attachment is tied to the sled on one end, and my belt on the other. I use this rope for all dragging movements.

I also use this rope attachment for ankle dragging. I simply attach two homemade ankle straps to the end of the rope (forming the letter “T”).

For upper body movements, I use a second rope attachment. This rope is longer. I insert the rope through the sled without tying it down. The rope is tied off in the middle, forming two attachments (as illustrated below).



Attachment For Two Handed Movements

On page 144, you can see the arrow pointing to the knot tied in the center of the rope. This knot causes the rope to branch into two separate handles, which are help in each hand. The rope is not tied to the sled. It simply runs through the hole.

Notice the difference between the two handed attachment and the traditional attachment used for dragging.

In the illustration to the right, you can see how a knot secures the rope to the sled.

If you purchase two snow sleds, you can leave one rope attachment on each sled. If not, it only takes a minute to change. A third option is to leave the two handed attachment on permanently, and tie both ends to your belt when dragging from the waist.

Find a system that works for you. I personally use two sleds. I do not like to tie and untie knots during a training session. The sleds are inexpensive so it may be worth the extra investment. I start my restoration session with lower body dragging movements, and finish with upper body movements using the two handed attachment.

The Exercises

Sled Bench Press – Press the arms out as if you were bench-pressing.

This movement is excellent to promote recovery throughout the chest.

Sled Curls – Curl the sled towards you.

Sled Rowing – Pull the hands in towards the armpits, as if you were performing a seated row. This exercise is excellent to induce blood flow to the upper back.

Rear Raise – Raise the arms upward and out.

Front Raise –Reverse the Rear Raise by facing away from the sled while pulling the shoulders forward. Mimic the motion of a dumbbell front raise.

Pec Deck – Begin with arms by your sides. Bring hands together working the chest and shoulders.

Tricep Extension - Keep the elbows close to the face and perform a tricep extension.

There are additional upper-body exercises that you can perform with the sled, but these are the primary movements. When training for restoration, you should integrate several exercises into one session. I typically perform a few sets of each exercise. These exercises can be a lifesaver when experiencing upper-body soreness.

Sample Restoration Workout

- **Forward Dragging x 75 meters** – Repeat 3 trips with 1 minute or less between sets. I recommend 60-90 pounds, depending on your strength and bodyweight. Do not be concerned with dragging heavy loads when training for restoration.

- **Backwards Dragging x 75 meters** – Repeat 3 trips with 1 minute or less between sets. I recommend 40-90 pounds, depending on your strength and bodyweight.

- **Upper-Body Combination x 100 meters** – Repeat 3 trips with 1 minute or less between sets.
    - Sled Bench Press x 25 meters
    - Front Raise x 25 meters
    - Rear Raise x 25 meters
    - Pec Deck x 25 meters

- **Ankle Dragging x 100 feet** – Repeat 2 trips with 1 minute or less between sets. I recommend 30-50 pounds, depending on strength and bodyweight.

This workout is brief and should not "feel intense". It is designed to induce blood flow and alleviate soreness.

Sled Dragging Summary

Throughout this chapter, I have demonstrated several sled dragging exercises. You can perform these exercises with an inexpensive homemade sled. You can use the sled for strength and conditioning purposes, or restoration.

When used for strength and conditioning, you should focus on moving heavy weights with the sled. Heavy sled dragging provides an excellent total-body workout.

Sled dragging is an enjoyable version of weighted GPP. You can use the sled in place of sandbag carrying or wheelbarrow walking. Each form of GPP provides unique benefits, hence the need for variety.

When used for restoration, I recommend an "as needed" approach to sled dragging. Use the sled after an intense strength session to help alleviate soreness and induce blood flow. Most combat athletes will not require as much restoration as power lifters. Our strength training schedule is just one portion of a much more complete program. Power lifters focus more attention towards intense weight training.

I typically drag a light sled for restoration after intense lifting days. As a fighter, you must be fresh for skill sessions and sparring. If you experience soreness, use the sled to promote recovery.

IMPORTANT ADVICE

"The closer one gets to the top, the more one finds there is no top." – Nancy Barcus

General Physical Preparation (GPP) prepares the athlete for more specialized training, commonly referred to as Specialized Physical Preparation (SPP).

What does this mean and how is it pertinent to combat athletes?

Combat training is very intense. Boxing, grappling, and wrestling are physically exhaustive. An athlete cannot be expected to spar 12 rounds on his first day in the gym. He must first prepare his body for the rigors of competition. GPP lays the foundation for more rigorous training.

Eventually, the athlete should incorporate more sport-specific movements and conditioning drills. Exercises such as sledgehammer swinging are excellent for strength and conditioning, but you are not competing in a sledgehammer-swinging contest.

No conditioning drill can replace the need for live sparring. As a boxer, you must box. As a wrestler, you must wrestle. As a grappler, you must grapple…

Your strength and conditioning program is designed to improve strength, power, and endurance.

Without skill, you will be unable to utilize these improvements. Power is useless if you do not know how to punch.

At some point, you must apply your conditioning towards a specific training objective. Many fighters make the mistake of overemphasizing strength and conditioning work, without training (and improving) technique. Do not make this mistake.

The sandbag will not teach you how to jab, or how to counter punch. Sandbag training will improve strength and muscular endurance, but it does not replace the need for sport-specific training.

I have worked with many fighters who cannot understand why they "run out of gas" when sparring. These fighters train hard, but cannot deduce why they become so fatigued.

Earlier I mentioned that it is important to stay relaxed during combat. It is arduous to hold an isometric contraction. Exercises such as wheelbarrow walking can help, but will not teach you to stay relaxed when punches are thrown. World-class fighters stay relaxed. They do not tense up during combat. They explode with power, while remaining relaxed. As a fighter, you must relax inside the ring. When you relax, your punches become more fluent. You become faster, stronger, and less predictable.

You must become comfortable standing directly in front of your opponent as he attempts to attack. You must gain confidence in your conditioning and defensive abilities. This poise is not developed with a sandbag; it is developed inside the ring. Do not overlook the importance of sport-specific skill training and practice.

Adding Sport-Specific Training

Suppose that John Doe arrives at the gym eager to compete as a kickboxer. Before John begins sparring, he must first develop a foundation of general fitness. Many coaches make the mistake of throwing their fighters into the ring too soon. The assumption is that sparring will “get you in shape”.

A fighter will benefit much more from a sparring session if he is already in shape. Sparring should emphasize technical aspects such as throwing combinations, defense, reaction punching, and feinting. When a fighter is fresh, he is much more likely to learn, develop, and remember new skills.

Sparring should not form the basis of your conditioning program. It is important to first lay the foundation with various non-weighted and weighted GPP movements. Only AFTER the foundation has been developed, should a fighter progress to more demanding training sessions such as sparring.

Experience Does Not Matter

Another common mistake occurs with more experienced athletes. Suppose John has several years of kickboxing experience. He plans to fight again in 3 months. In many situations, John will jump right into the ring, or onto the heavy bag, completely neglecting GPP.

Experience is irrelevant when considering the importance of GPP. No amount of ring experience vetoes the need for GPP. GPP should become a permanent fixture in your athletic career. We are ALL capable of physical improvements. There are no exceptions to this rule.

GPP and sport-specific training are not mutually exclusive. You do not reach a point where you no longer require GPP. Rather, you lay the foundation with GPP, and gradually funnel the conditioning program towards your specific sport.

For example, suppose you have 12 weeks to prepare for a bout. Your initial phase of training should emphasize GPP. You must develop an adequate base of fitness to prepare the body for the rigorous demands of sparring and other sport-specific training drills. If you jump into the ring too soon, you will risk injury.

Once your foundation has been laid, you can gradually introduce more sport-specific conditioning drills. You can incorporate heavy bag drills and controlled sparring. During this time, you can (and should) continue to perform non-specific conditioning drills (Burpees, sandbag conditioning, etc.).

Just because you begin sparring does not mean that GPP style conditioning should be ignored. Two of the most common **mistakes** that I have observed with trainers today are the following:

Mistake #1

GPP is completely ignored. Skill training and conditioning get lumped together. The fighter enters the ring without an adequate foundation. He begins to spar despite poor fitness. The fighter consequently develops bad habits. He begins to make mistakes such as dropping his hands before and after punching. To a fighter who is out of shape, the gloves feel like heavy dumbbells. After constantly dropping his hands while fatigued, the fighter becomes “programmed” to drop his hands. Bad habits are VERY difficult to break.

In addition to developing bad habits, these fighters lose confidence. A novice fighter can become overwhelmed by the fatigue and pain experienced inside the ring. They are out of shape, and have no chance of succeeding inside the ring. Confidence is one of the most important elements of combat. Your must enter the ring confident in your abilities. When you become completely exhausted while sparring out of shape, you will always question whether you will experience that same level of fatigue during competition.

A fighter who lacks confidence is doomed to failure. It is very difficult to improve a fighter’s confidence. If you are out of shape, you have no business sparring. Get in shape first, and then begin to work inside the ring.

Mistake #2

GPP is introduced, and then completely removed once the fighter's foundation has been established. The fighter raises his work capacity and overall fitness through GPP, and then removes this form of conditioning, in place of sparring and other "sport-specific" training drills.

I recommend performing GPP style conditioning throughout the entire training camp. Obviously, your emphasis will shift more towards sport-specific skill work, but you should not overlook the benefits of GPP.

GPP and SPP are not mutually exclusive. GPP prepares for SPP, and the two continue to coexist in a successful training program.

Recommended Approach

1. Develop a foundation through GPP. Incorporate variety into your conditioning routine. During this time, you can concentrate on less intense sport-specific training such as shadow boxing and light bag work.

2. Gradually introduce more sport-specific drills, while continuing to focus on improving work capacity through GPP.

3. As you begin more intense sport-specific training, continue to perform GPP, but on a limited basis. GPP lays the foundation, but never disappears. Do not remove GPP from the training equation. Gradually shift your emphasis from general conditioning to more sport-specific conditioning and skill training, without sacrificing the foundation that has been developed through GPP.

As mentioned earlier in this manual, the benefits of GPP are truly innumerable. Do not remove GPP from your training schedule. Develop your foundation, and then continue to improve it.

Skills Pay the Bills

With all this talk about GPP and conditioning, it is important to clarify that no amount of strength and conditioning will teach you how to fight. Skill training comes in many forms. A few examples include shadow boxing, bag training (heavy bag, double end bag, maize ball, etc.), controlled sparring, punch mitt training, and partner drills.

Always remember that strength, power, and endurance are useless if you lack the skills necessary to execute and apply these physical attributes.

A complete training routine must be COMPLETE. Do not focus all of your energy towards one training objective. No amount of strength training or conditioning will teach you the intricate details of combat. Regardless of your fighting art (boxing, MMA, wrestling, etc.), you must develop the tools of the trade.

Strength and conditioning should supplement a training program, not replace it.

Summary

The focus of this book has been on various strength and conditioning movements. A strong, well-conditioned fighter is often victorious.

With this said, do not overlook the importance of skill training. No amount of strength and conditioning work can replace the need for sport-specific skill training. Strength and conditioning work must coexist with your skill training objectives.

TRAINING ROUTINES

"Victory belongs to the most persevering." – Napoleon Bonaparte

In this chapter, I will list several training routines. I will then conclude with a chapter dedicated to program creation.

Do not be overwhelmed or confused by the vast selection of routines. It is natural to be perplexed about how you will include each form of training into a weekly routine.

Do not be concerned. The final chapter will explain how each piece fits into a complete training puzzle.

Use this chapter as a reference. Make copies of the routines from this chapter to have on hand while training.

This chapter contains routines for the for following training objectives:

- Strength training
- Warrior Challenges
- Routines that combine strength and conditioning
- Bodyweight exercise routines
- Non-weighted GPP
- Interval Training
- Weighted GPP
- Core Training
- And more…

These routines promise to crank up the intensity.

STRENGTH TRAINING ROUTINES

This section begins with several sandbag strength circuits.

Two-Day Per Week Strength Program #1

Strength Workout - Day 1		
Exercise	**Set**	**Reps**
Zercher Squats	3	20
One Legged Squats	3	8 per leg
Dumbbell Snatches	3	10 per arm
Sandbag Clean and Press	3	6
Weighted Dips	3	10
Weighted Chins / Pulls	4	8

Strength Workout - Day 2		
Exercise	**Set**	**Reps**
Front Squat Push Press	3	8
Sandbag Shouldering	3	10 per side
Snatch and Catch	3	8
Sandbag Rows	3	10
DB Swings	3	10 per arm
Weighted Chins / Pulls	4	8

Important Notes

1. On Day 1, you will begin with 3 sets of 20 Zercher Squats. Twenty repetitions may seem like a lot, but most sandbags only weigh 100 to 200 pounds. Sandbag squats improve strength and muscular endurance. Maintain a brisk pace.

2. The repetition recommendations that I have listed for each exercise are estimates. I recommend a system that incorporates variety such as the periodization examples listed in the strength training chapter. Make adjustments according to your specific training goals.

3. Incorporate variety when performing weighted chin-ups/pull-ups. There are several variations to choose from (ex. Towel Pull-ups).
    a. You can also substitute weighted chin-ups and pull-ups with any of the previously listed pull-up repetition systems (ex. ladders, pyramids, 100 reps, etc.).

Two-Day Per Week Strength Program #2

Strength Workout - Day 1		
Exercise	**Set**	**Reps**
Sandbag Shoulder + Squat	3	8 per side
Overhead Lunges	3	6 per leg
Sandbag Clean and Press	3	6
Dumbbell Snatches	3	10 per arm
Sandbag Curls	3	8
Weighted Dips	3	10

Strength Workout - Day 2		
Exercise	**Set**	**Reps**
Front Squat Push Press	3	8
Bulgarian Squats	3	8 per leg
Sandbag Rows	3	10
Handstand Pushups	3	6
DB Swings	3	10 per arm
Weighted Chins / Pulls	4	8

This routine can interchanged with **Program #1**. You should use a heavy sandbag for these programs.

Sandbag Power and Conditioning Circuit

The circuit below integrates strength work and conditioning.

- Sandbag Rowing
- Sandbag Deadlifts
- Burpees
- Sandbag Clean and Press
- Zercher Squats
- Lateral Jumps

Perform 10 repetitions per exercise. Use one sandbag for all lifting exercises. Select the heaviest bag that you can handle. Minimize rest between exercises to 20-30 seconds.

After completing all 6 exercises, rest 1-minute. Repeat this circuit 3-6 times. This circuit will not take long to complete, but is very intense. This circuit can be used as a replacement to a strength training session. Do not perform this circuit more than 2-3 days per week.

Two-Day Per Week Complex Training Program

Complex Training - Day 1			
Set	**Exercise**	**Set**	**Reps**
1a	Zercher Squats	3	12
1b	Lateral Jumps	3	12
2a	Dumbbell Snatches	3	10 per arm
2b	MB Underhand Jump Throw	3	8
3a	Sandbag Clean and Press	3	6
3b	MB Overhand Throw	3	8
4a	Weighted Chins	3	6
4b	MB Slams	3	10

Complex Training - Day 2			
Set	**Exercise**	**Set**	**Reps**
1a	Zercher Lunges	3	6 per leg
1b	Burpees	3	10
2a	Sandbag Clean and Press	3	6
2b	Plyometric Pushups	3	10
3a	Sandbag Rows	3	8
3b	MB Overhand Throw	3	8
4a	Dumbbell Snatches	3	10 per arm
4b	MB Woodchoppers	3	10

Important Notes

1. When performing Dumbbell Snatches, you should alternate between left and right arm, so you will begin the plyometric movement with both arms "activated".

2. Allow adequate rest between each complex set. Minimize rest between the strength exercise (ex. 1a) and plyometric movement (ex. 1b). For example, on Day 1 you will begin with a set of Zercher Squats and immediately proceed to Lateral Jumps. Upon completing Lateral Jumps, allow 2-5 minutes of rest before performing your second set. Optimal rest is important for optimum speed and power development. These routines are NOT designed to enhance muscular endurance.

COMPLETE WORKOUTS

These routines integrate strength and conditioning work. These workouts can replace a strength training session. Use a heavy sandbag.

Sandbag Adrenaline

Shoulder and Punch - Repeat 4 times

- Extreme Burpee Shouldering x 12 Reps (6 per shoulder)
- Shadow boxing x 1-minute (focus on hard punches)
- Rest 1-minute between circuits, no rest between exercises

Twisting and Throwing - Repeat 3 times

- Sandbag Lunge Twist x 12 (6 per side)
- Sandbag Throws x 6 to each side
- Rest 1-minute between circuits, 20-30 seconds between exercises

If your facility does not allow for Sandbag Throws, substitute Side-to-Side Loading x 16 (8 per side).

Snatch and Swing – Repeat 3 times

- Sandbag Snatch and Catch x 10
- Dumbbell Swings x 10 per arm
- Rest 1-minute between circuits, no rest between exercises

Pushing and Jumping – Repeat 3 times

- Sandbag Push Press x 6
- Lateral Jumps x 10
- Fingertip pushups x 10
- Rest 1-minute between circuits, no rest between exercises

Core Circuit – Repeat 3 times

- Chinnies x 30
- V-ups x 15
- Supermans x 15
- 30 seconds rest between circuits, no rest between exercises

Finisher with heavy bag

- Sandbag Bear Hug - carry until failure

This workout is a personal favorite of mine.

Integrated Action

Non-weighted GPP - Repeat 4 times

- Burpees x 30 seconds
- Jumping Jacks x 30 seconds
- Mountain Climbers x 30 seconds
- Shadow boxing x 30 seconds
- Rest 1-minute between circuits, no rest between exercises

Power Circuit – Repeat 3 times

- Sandbag Clean and Press x 6
- Side-to-Side Loading x 10 (5 each side)
- Rest 1-minute between circuits, 1-minute or less between exercises

Pyramid #1

- Fingertip Pushups – Pyramid with 3, 6, 9, 12, 9, 6, 3
- Knuckle Pushups – Pyramid with 3, 6, 9, 12, 9, 6, 3

Alternate between Fingertip Pushups and Knuckle Pushups. For example, perform 3 Fingertip Pushups, then 3 Knuckle Pushups, then 6 Fingertip Pushups, then 6 Knuckle Pushups, and continue. Minimize rest between sets.

Pyramid #2

- Towel Pull-ups – Pyramid with 2, 4, 6, 4, 2
- Handstand Pushups – Pyramid with 2, 4, 6, 4, 2

Alternate between Towel Pull-ups and Handstand Pushups. Minimize rest between sets.

Lower Body Circuit

- Zercher Squats x 12
- Lateral Jumps x 12 (over the bag)
- Two Legged Calf Raises while holding sandbag x 30
- Rest 1-minute between circuits, no rest between exercises

Core Circuit – Repeat 3 times

- Grasshoppers x 50
- Chinnies x 30
- V-ups x 10
- 1 minute of rest between circuits, no rest between exercises

Finisher with heavy bag

- Sandbag Bear Hug - carry until failure

Circuit Mania

Sandbag Carry

- Sandbag Overhead Walk – 1 minute
    - If training indoors, you can walk back and forth, no excuses.

Sandbag Circuit #1 – Repeat 3 times

- Sandbag Clean and Press x 6 reps
- Zercher Lunges x 6 reps per leg
- Fingertip Pushups x 15
- Lateral Jumps over sandbag x 20 reps
- One-minute of rest between circuits, no rest between exercises

Sandbag Carry

- Sandbag Overhead Walk – 1 minute

Bodyweight Circuit – Repeat 3 times

- Burpees x 10
- Pushups x 15
- Rest 30 seconds between circuits, no rest between exercises

Sandbag Circuit #2 – Repeat 3 times

- Deadlifts x 10
- Sandbag Rows x 10
- Zercher Squats x 10
- Core Twist x 12
- One-minute of rest between circuits, 20-30 seconds rest between exercises

Core Circuit – Repeat 3 times

- V-Ups x 15
- Chinnies x 30
- Supermans x 15
- 30 seconds rest between circuits, no rest between exercises

Sandbag Carry

- Bear hug walk until failure

Backpack Attack

For this routine, you will wear the weighted backpack for all exercises denoted with a * symbol. You may remove the backpack if it is too difficult to perform the required repetitions.

Rest 30 seconds or less between pyramid exercises.

Tricep Blaster

- Bodyweight Tricep Extension* – Pyramid to 5 (ex. 1, 2, 3, 4, 5, 4, 3, 2, 1)

Pushup Power

- Advanced Chair Pushup* – Pyramid with reps of 3, 6, 9, 12, 9, 6, 3

Upper Body Power

- Pull-ups* – Pyramid with 2, 3, 4, 5, 4, 3, 2
- Handstand Pushups – Pyramid with 2, 3, 4, 5, 4, 3, 2

Alternate between Pull-ups and Handstand Pushups. For example, perform 2 Pull-ups, then 2 Handstand Pushups, then 3 Pull-ups, then 3 Handstand Pushups, and continue. Remove the backpack for Handstand Pushups.

Lower Body Circuit – Repeat 3 times

- Bodyweight Squats* x 25
- Burpees x 10
- 30 seconds rest between circuits, no rest between exercises

Core Circuit – Repeat 3 times

- Standing Wheel Rollouts x 5
- Knee Hugs x 20
- Chinnies x 20
- 30 seconds rest between circuits, no rest between exercises

If the Standing Wheel Rollouts are too difficult, roll from the knees x 40 reps

This workout can be used on non-strength training days. For example, if you perform a strength workout on Wednesday and Saturday, you can perform this workout on Monday and Friday. It does not take long, but is very effective.

Short and Sweet

This workout incorporates some of the best bodyweight exercises. This workout can be used on non-strength training days.

Mini-Circuit – Repeat 5 times

- 10 Burpees
- 10 Pushups
- Rest 20-30 seconds between circuits, no rest between exercises

Lower Body Power

- One Legged Squats – Pyramid with reps of 3, 6, 9, 6, 3
- Glute-Ham Raises – Pyramid with reps of 3, 6, 9, 6, 3

Alternate between One-legged Squats and Glute-Ham Raises. For example, perform 3 One-legged Squats, then 3 Glute-Ham Raises, then 6 One-legged Squats, then 6 Glute-Ham Raises, etc…

Pulling and Pushing

- Towel Pull-ups – Pyramid with 2, 3, 4, 5, 4, 3, 2
- Handstand Pushups – Pyramid with 2, 3, 4, 5, 4, 3, 2

Alternate between Pull-ups and Handstand Pushups. For example, perform 2 Pull-ups, then 2 Handstand Pushups, then 3 Pull-ups, then 3 Handstand Pushups, etc…

Upper Body Circuit – Repeat 3 times

- Bodyweight Tricep Extension x 5
- Advanced Chair Pushup x 10
- Rest 1-minute or less between circuits, no rest between exercises

Standing Wheel Rollout – 3 sets of 5

Core Circuit – Repeat 4 times

- One Arm Plank x 20 seconds per arm
- Chinnies x 20
- Superman x 12
- 30 seconds rest between circuits, no rest between exercises

WARRIOR CHALLENGES

Motive is defined as *"something that causes a person to act*". A motivated athlete has a *motive* to train. Motivation originates out of the desire to succeed. Competition breeds motivation. It is human nature to compete.

The **Warrior Challenges** that follow should be viewed as competitions. Compete against yourself, or with training partners. These workouts will challenge your strength and stamina. You can use these challenges to replace a strength or conditioning workout, or as a finisher to your weekly program.

The Sandbag Interval Challenge

Complete four intervals, each consisting of the following:

- 400 meter run
- Sandbag Clean and Press x 10
- Burpees x 12

Perform this workout on a 400-meter track. Use a 100-pound sandbag. Your goal is to complete four intervals as fast as possible. This challenge will improve strength and anaerobic endurance.

This challenge requires an explosive lift immediately after a 400-meter interval run. You will become exhausted from the run, but must continue by cleaning and pressing the sandbag. You will then continue to train muscular endurance by performing a set of 12 Burpees. Inside the ring, you will require anaerobic strength and endurance, as well as the ability to explode with power, despite tremendous fatigue. This workout will prepare you.

The Interval Challenge

Complete four intervals, each consisting of the following:

- 12 Burpees
- 24 Pushups
- 36 Bodyweight Squats
- 400 meter run

This challenge is intense, and does not require equipment. This workout can be used in place of an interval roadwork session.

Carry, Run, and Press

Complete three intervals, each consisting of the following:

- 400 meter sandbag carry (any style of carrying)
- 400 meter run without sandbag
- Sandbag Clean and Press x 10

Use a 100-pound sandbag. This challenge is best performed at the end of the week. You will need the time to rest and recover.

This workout has also been dubbed the Carry, Run, Press, and Puke challenge.

300 Yards of Hell

Perform this routine on a 100-yard football field. Use a 100-pound sandbag.

There are three sandbag exercises used for this challenge:

- Power Clean Throw
- Zercher Lunge Walk
- Sandbag Throws

Perform 5 Power Clean Throws, then 5 Zercher Lunge steps (5 steps per leg), and then 5 Sandbag Throws (alternate left to right). You will continue this routine for 300 yards (3 trips down the field). This routine is one of the most intense **Warrior Challenges**. This challenge can substitute an entire day's training schedule. I recommend **300 Yards of Hell** on a Saturday morning. You can then rest for the remainder of the weekend.

Swinging and Snatching

Use a 50-pound dumbbell for this challenge.

- Run 400 meters
- 10 Dumbbell Snatches with each arm
- Run 400 meters
- 10 Dumbbell Swings with each arm
- Run 400 meters
- 10 Dumbbell Snatches with each arm
- Run 400 meters
- 10 Dumbbell Swings with each arm

Lifting and Loading

Perform 50 repetitions per exercise. Start with a 100-pound sandbag. Increase the weight when necessary.

There are three sandbag exercises that are used for this challenge:

- Sandbag Clean and Press
- Zercher Squat
- Sandbag Loading

Perform 50 repetitions per exercise, in no particular order. This workout can replace a strength training session.

Dead Man Walking

This routine consists of five exercises:

- Zercher Lunge Walk
- Sandbag Carry
- Deadlift Walking
- 100 meter sprint (without sandbag)
- 100 meter backwards sprint (without sandbag)

Perform this routine on a 100-meter stretch, traveling back and forth with each exercise. Each step requires 100 meters of continuous work. Begin with a 100-meter Zercher Lunge Walk. You will then carry the sandbag back to the starting position. Move as fast as possible. Upon returning to the starting position, you will leave the sandbag behind, and sprint the length of the field. You will then return to the starting position by running backwards.

Pick the sandbag back up, and travel 100 meters with a Deadlift Walk. Take two steps, and then return the bag to the ground. Deadlift it again, and take two more steps. Continue the length of the field with this pattern. You will then proceed with a Sandbag Carry, a sprint, and a final backwards run.

1. Zercher Lunge Walk x 100 meters →
2. Sandbag Carrying (any style) x 100 meters ←
3. Sprint 100 meters →
4. Run backwards 100 meters ←
5. Deadlift Walking x 100 meters →
6. Sandbag Carrying (any style) x 100 meters ←
7. Sprint x 100 meters →
8. Run backwards x 100 meters ←

The Living Room Challenge

This challenge can be performed in your living room. This challenge consists of three exercises, each performed for a 3-minute round.

Your goal is to perform as many repetitions, with as much weight as possible. You must use the same weight for the entire challenge. Allow no more than 2 minutes of rest between rounds. Rest as needed during each round. One strategy is to use a light bag for high repetitions. Another (preferred) strategy is to use a heavy bag for fewer repetitions. For example, perform 5 reps of clean and press, then rest briefly, and continue. Either strategy promises an intense strength and conditioning challenge.

Round #1

- Sandbag Clean and Press

Round #2

- Zercher Squats

Round #3

- Sandbag Shouldering

To calculate scores for this routine, perform the following equation for each exercise:

Reps x Weight = Score per round

Sum all three rounds to calculate your total score.

Warrior Challenge Summary

The **Warrior Challenges** are extremely intense. These workouts will "challenge" you physically and mentally. Do not perform more than one challenge per week. Use a training journal to record your times for each challenge.

You will be amazed how quickly these workouts will improve strength and muscular endurance. It is always helpful to add a competitive element to your workout.

We train hard because of our desire to succeed. As an athlete, you must incorporate competition into your training program. Compete against yourself or fellow training partners.

Train to win!

CONDITIONING DRILLS

Non-Weighted GPP Circuit #1 (3 minutes)

- Burpees x 30 seconds
- Jumping Jacks x 30 seconds
- Grasshoppers x 30 seconds

Perform this circuit twice without rest (Duration = 3 minutes). Complete 4-6 sets with 1-minute of rest between sets (no rest between exercises).

Non-Weighted GPP Circuit #2 (3 minutes)

- Burpees x 30 seconds
- Jumping Jacks x 30 seconds
- Shadow boxing x 30 seconds

Perform this circuit twice without rest (Duration = 3 minutes). Complete 4-6 sets with 1-minute of rest between sets (no rest between exercises).

Non-Weighted GPP Circuit #3 (4 minutes)

- Burpees x 30 seconds
- Mountain Climbers x 30 seconds
- Split Jumps x 30 seconds
- Grasshoppers x 30 seconds

Perform this circuit twice without rest (Duration = 4 minutes). Complete 3-6 sets with 1 minute of rest between sets (no rest between exercises).

Outdoor Conditioning Circuit #1 (3 minutes)

- Sprint 50 meters
- 10 pushups
- Run backwards 50 meters (return to starting position)
- 10 Burpees
- Continue for 3 consecutive minutes

Repeat 4-6 rounds with 1-minute of rest between rounds.

Work through each Minute Drill with **MAXIMUM INTENSITY**.

Outdoor Conditioning Circuit #2 (No Time Limit)

- Perform 12 Burpees
- Immediately sprint 100 meters
- Perform 10 Plyometric Pushups
- Jog back to the starting point and continue
- Repeat 6-10 times

For this routine, you will begin with 12 explosive Burpees. After completing 12 repetitions, you will proceed with an all out sprint for 100 meters. As soon as you have completed the sprint, drop down to the ground and perform 10 Plyometric Pushups. You can add a clap to these pushups if you wish. After completing 10 pushups, return to your feet and jog back to the starting line. Repeat this cycle 6-10 times without resting. Your only rest is the jog back to the starting point, after each set of pushups.

GPP Circuit With Dumbbells #1 (4 minutes)

- 30 seconds x Burpees
- 1 minute of Dumbbell Swings (30 seconds each arm)
- 30 seconds of all out shadow boxing

Perform this circuit twice without rest (Duration = 4 minutes). Complete 4-6 sets with 1 minute of rest between sets (no rest between exercises).

This conditioning routine is highly recommended. During the 30-second intervals of shadow boxing, focus on throwing FAST punches. Throw as many punches as possible.

GPP Circuit With Dumbbells #2 (2 minutes)

- 30 seconds x Burpees
- 1 minute of Dumbbell Swings (30 seconds each arm)
- 30 seconds x Burpees

Complete 4-6 sets with 1 minute of rest between sets (no rest between exercises).

This conditioning drill is only 2-minutes in duration, but you can expect it to be an intense 2-minutes!

GPP Circuit With Sandbag (Approx. 3 minutes)

Use a heavy sandbag for this routine.

- Burpee Shouldering x 12 (6 per arm)
- Burpees (without sandbag) x 10
- Shadow boxing x 30-60 seconds

For this routine, you will begin with Burpee Shouldering for 10 repetitions. Depending on the weight of your bag, this will take between 90 and 110 seconds. If you find yourself working through 12 repetitions in less than 90 seconds, increase the weight of your bag. I recommend starting with 100 pounds. This weight will be more challenging than it may first appear.

After finishing 12 repetitions, perform 10 Burpees. Focus on exploding off the ground with each repetition. This portion of the routine should take approximately 30 seconds. At this point, you will have worked between 120 and 150 seconds.

Proceed to shadow box until 3 minutes have passed. Depending on how long the Burpees take to perform, you will average between 30 and 60 seconds of shadow boxing. At this point, you will be quite fatigued. It will be difficult to throw effective punches. Fight through the fatigue, focusing on quality punches.

This routine will be very challenging. There is no questioning its intensity. I recommend starting with 3 rounds, allowing 1-minute of rest between rounds. Try to work your way up to 6 x 3-minute rounds.

This routine may feel impossible at first, but stick with it and you will notice tremendous improvements in anaerobic endurance. I cannot say enough about the effectiveness of this routine.

A Power Option

You can perform a variation to this drill by removing the bodyweight Burpees. At first glance, this may appear to be an “easier” variation, but it is not. You will perform Extreme Burpee Shouldering x 12 (6 per arm) and then proceed with 1-minute of shadow boxing. Your legs will be extremely fatigued. Work through the exhaustion by throwing hard punches during each minute of shadow boxing.

- Extreme Burpee Shouldering x 12 (6 per arm)
- Shadow boxing x 30 seconds

Complete 4-6 rounds with 1 minute of rest between rounds.

Jump Rope Circuits

These jump rope circuits are excellent for conditioning.

Jump Rope Circuit #1

- 100 rope turns – (Sprint in place)
- 10 Burpees
- 10 Pushups
- 10 Bodyweight Squats
- Repeat 8 times without rest

Jump Rope Circuit #2

- 20 Double Unders
- 10 Pushups
- Continue nonstop for 2-minutes
- Rest 30-45 seconds between rounds, complete 4-6 rounds.

Jump Rope Circuit #3

- 100 rope turns – (Sprint in place)
- 50 Double Unders
- 10 Burpees
- 1 minute of shadow boxing (or 100-150 punches)
- Rest 30-45 seconds between rounds, complete 4-6 rounds.

Jump Rope Circuit #4

- 50 Double Unders
- 5 Burpees
- Continue nonstop for 2-minutes
- Rest 1 minute between rounds, complete 4-6 rounds.

Jump Rope Circuit #5

- 50 rope turns – (Sprint in place)
- Burpee Pyramid 1-10 (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1)
- Alternate between 50 rope turns and each set of burpees

For **Circuit #5**, you begin with Sprint In Place rope skipping (50 rope turns). You then perform 1 Burpee, before continuing with 50 more rope turns. After each set of 50 rope turns, you will perform a set of Burpees (**without rest**). Pyramid from 1 – 10 and back to 1. For example, 50 rope turns + 1 Burpee, 50 rope turns + 2 Burpees, all the way up to 10 Burpees. You can then climb back down the pyramid (9 Burpees, 8 Burpees, … 1 Burpee). If 1-10 is too high to climb, start by climbing 1-5. Build yourself up gradually.

Burpee Intervals

- Burpees x 30 seconds
- Shadow boxing x 30 seconds

Repeat this circuit two or three times without rest.

Begin with 30 seconds of Burpees, and immediately follow with 30 seconds of shadow boxing. Continue this pattern for an entire 2 or 3-minute round. You will then rest 1-minute (or 30 seconds) between rounds.

During the shadow boxing portion of the interval, focus on throwing hard punches. The purpose of this drill is to train the body to respond when fatigued. Fight through the exhaustion by throwing hard punches throughout the interval.

Beginner Program

- 4 x 2-minute rounds with 1 minute of rest between rounds

Intermediate Program(s)

- 6 x 2-minute rounds with 1 minute of rest between rounds
- 4 x 3-minute rounds with 1 minute of rest between rounds

Advanced Program

- 6 x 3-minute rounds with 1 minute of rest between rounds

Master's Program

- 6 x 3-minute rounds with 30 seconds of rest between rounds

Burpee Intervals are one of the most intense conditioning drills that you can perform. Do not allow yourself to quit during these intervals. These intervals will develop the physical AND mental toughness required for combat. There is NO EXCUSE to skip a conditioning workout. These intervals can be completed in less than 10 minutes, and do not require a trip to the gym. You can perform these intervals anywhere.

Keeping Track of Time

Due to the intense nature of these routines, it may be difficult to keep track of time if you are training alone. I recommend wearing a sport wristwatch that has a digital timer. You can find an inexpensive sport watch at any department store.

You can also estimate time by counting repetitions for each exercise. For example, you will average approximately 10-15 burpees every 30 seconds. I personally monitor my time with a sports watch. If this is inconvenient, count repetitions. Find a system that works for you.

Medicine Ball Conditioning - Indoors

You can integrate three of the previously illustrated medicine ball exercises to create an intense conditioning routine.

- Medicine Ball Burpees x 30 seconds
- Medicine Ball Slams x 30 seconds
- Medicine Ball Woodchoppers x 30 seconds

Perform this circuit twice without rest (Duration = 3 minutes). Complete 4-6 sets with 1 minute of rest between sets (no rest between exercises).

If you do not wish to monitor time for this circuit, you can perform 10 repetitions per exercise. If you choose this option, perform the circuit twice without resting. Repeat 4-6 total circuits, with 1 minute of rest between sets.

Medicine Ball Conditioning - Outdoors

The medicine ball is also excellent for outdoor conditioning. The following circuit integrates various medicine ball throws with sprinting.

- Medicine Ball Chest Pass x 5
- Medicine Ball Underhand Jump Throw x 5
- Medicine Ball Overhand Throw x 5

For this routine, you will throw the medicine ball, and sprint to retrieve it. As soon as you retrieve the ball, pick it up and throw it again. You will perform 5 repetitions for each throwing variation. Continue to throw and sprint after the medicine ball for an entire 3-minute round.

Complete 4-6 sets with 1 minute of rest between sets

You can perform this routine with limited space. Simply throw the ball in one direction, sprint after it, and throw it back towards your starting position. Continue back and forth.

If you have access to a larger park or field, you can perform this exercise by continuing the length of a field. For example, throw and retrieve the medicine ball for an entire 100-meter field.

Find a system that works for you. This routine is intense and effective. During each 3-minute round, you will perform explosive upper body movements (medicine ball throws) in conjunction with explosive, short distance sprints. This routine will develop the explosive muscular endurance necessary for combat.

Warrior Running

Interval Roadwork Session #1

- 10-minute warm-up
- 4 x 400 meter
    - 1-minue of active rest between intervals
- 4 x 200 meter
    - 30 seconds of active rest between intervals
- 4 x 100 meter
    - Jog back to starting line for active rest
- 400-meter jog (cool down)

For this routine, you will begin with 4 x 400-meter intervals. Rest 1-minute between each 400-meter interval. As your fitness improves, you can incorporate active rest into your 1-minute rest. I recommend shadow boxing or a light jog. Following the 400-meter intervals, you will proceed to 4 x 200-meters. Allow 30 seconds of (active) rest between each 200-meter interval.

The 100-meter sprints should be performed *wind-sprint style*. You will sprint 100 meters, then jog back to the starting point, and continue. Your rest period is limited to the time necessary to jog back to the starting point.

Interval Roadwork Session #2

- 10-minute warm-up
- 2 x 400 meter intervals
    - 1-minute of active rest between intervals
- 3 x 200 meter sprints
    - 30 seconds of active rest between intervals
- 4 x 100 meter sprints
    - Jog back to starting line for active rest
- 5 x 50 meter sprints
    - Jog back to starting line for active rest
- 400 meter jog (cool down)

Pyramid Roadwork Program

- 800 meter warm-up jog
- 200 meter interval
- 300 meter interval
- 400 meter interval
- 500 meter interval
- 400 meter interval
- 300 meter interval
- 200 meter interval
- 400 meter jog (cool down)

Recovery between each interval will consist of a 200-meter jog**.** After completing your final 200-meter interval, you will jog for 400 meters to cool down.

If interval training is new to you, I recommend starting with 4 x 400 meters. When raising the intensity of your interval routine, you can run faster, reduce rest periods between intervals, increase the intensity of active rest (jogging, shadow boxing, calisthenics, etc.), or increase the total number of intervals (or distance). Do not increase more than one component at a time. Interval training is very demanding. These workouts should not be performed more than 2-3 days per week.

Sprint Workout #1

- Sprint 100 meters
- Jog back to starting point
- Repeat 10 times

A variation to this workout is to sprint the straight-aways on a 400-meter track, and jog the turns. Continue for five full laps around the track. Each 400-meter lap consists of two 100-meter sprints, and two 100-meter jogs.

Sprint Workout #2

- 4 x 200 meters
  - 30 seconds of rest between sprints
- 5 x 100 meters
  - Wind sprints (jog back to starting line and continue without rest)
- 10 x 50 meters
  - Wind sprints (same as above)

This workout is time efficient and effective. You can surely find time for this workout. Start all sprint sessions with 8-12 minutes of warm-up. Finish with a mild cool down consisting of light jogging.

Sprint Workout Variation

If you really want a challenge, perform 10 pushups and 10 dumbbell snatches (5 per arm) after each sprint. For example, sprint 100 meters, 10 pushups, 10 dumbbell snatches, jog back to starting line and continue.

- Sprint 100 meters
- 10 Pushups
- 10 Dumbbell Snatches (5 per arm)
- Jog back to starting point
- Repeat 10 times

Your total workout will consist of 1000 meters of sprint work, 100 pushups, and 100 dumbbell snatches.

Machine Based Intervals

You can also conduct interval training indoors with equipment such as a jump rope, stationary bike, or VersaClimber. By adding variety to your interval program, you will prevent boredom and reduce the likelihood of overuse injury.

Below I have listed a 6-week interval program. You can perform these intervals on the track, or indoors with any of the previously listed items. Always begin with 8-12 minutes of warm-up at moderate intensity. Work through each interval at near-maximum intensity. After 6 weeks, you will notice tremendous improvements in anaerobic endurance.

Note: *These intervals can also be performed on the heavy bag for an intense sport-specific conditioning exercise.*

	Interval Schedule Weeks 1-2		
	Intervals	**Work Period**	**Rest Period**
	5	60 seconds	60 seconds
	5	30 seconds	30 seconds
Totals	**10**	**450 seconds**	**450 seconds**

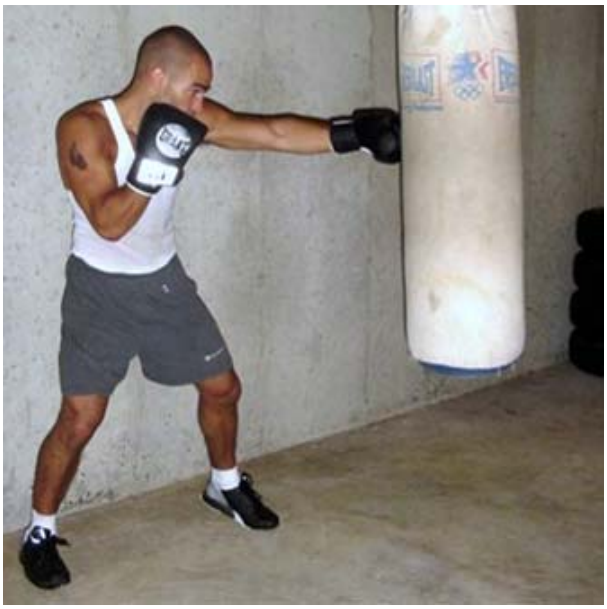
	Interval Schedule Weeks 3-4		
	Intervals	**Work Period**	**Rest Period**
	4	60 seconds	60 seconds
	4	45 seconds	30 seconds
	4	30 seconds	20 seconds
Totals	**12**	**540 seconds**	**440 seconds**

	Interval Schedule Weeks 5-6		
	Intervals	**Work Period**	**Rest Period**
	5	45 seconds	30 seconds
	5	30 seconds	20 seconds
	5	20 seconds	10 seconds
Totals	**15**	**475 seconds**	**300 seconds**

Using Weeks 1-2 as an example, you will perform 5 x 60 second intervals at near-maximum intensity. You will rest 60 seconds between each interval. After completing your final 60-second interval, you will proceed with 5 x 30 second intervals with 30 seconds of rest between each. If using a machine, I recommend complete rest, as opposed to active rest. It is inconvenient to step off the machine to perform active rest such as shadow boxing.

This interval program is based on time, not distance. The previously listed interval routines used distance (ex. 400 meters). Time is actually a superior measure due to individual differences. A track athlete may run a 400-meter interval in 50 seconds, while a heavyweight fighter may require 70-80 seconds. In this situation, the heavyweight will work 20-30 seconds longer. Distance is convenient when training several athletes, but if you train alone, you may wish to train around predetermined times.

The 10 x 10 System



The **10 x 10 System** is an intense conditioning drill that you can use on the heavy bag, or when shadow boxing.

You will throw straight punches for this drill. From your regular boxing stance, you will throw a rapid-fire 10-punch combination. You will throw a non-stop 1-2-1-2-1-2-1-2-1-2 (1=jab, 2=cross). Your focus must be on throwing fast, powerful punches. It is important to fully extend and snap your punches. It is important to punch hard throughout the entire drill. Pivot on the balls of your feet and rotate the hips. It is important to maintain proper form.

Upon completing the 10-punch combination, you will reset your feet and repeat the drill. It should only take 1-2 seconds to reset. Do not exceed 2 seconds before throwing your second 10-punch combination, once again focusing on speed AND power.

Continue this sequence ten times before resting. Each cycle of the **10 x 10 System** consists of 100 punches (10 x 10).

Repeat this drill for 4-10 cycles. Limit your rest between cycles to less than 1-minute. As your condition improves, you can reduce rest to 30 seconds.

Sample Session

- 1-2-1-2-1-2-1-2-1-2
- Reset
- 1-2-1-2-1-2-1-2-1-2
- Reset

Continue for 10 sets of 10 punches (100 total). Rest for 1-minute or less and continue. Strive to complete 10 rounds of the **10 x 10 System**.

Quality Punches

This drill emphasizes quality punches. You throw 10 hard punches, reset, and continue with 10 more quality punches. This form of training is unique from the

traditional bag drill where you throw non-stop punches for a specific time period. Both drills are useful, but for different reasons. When you punch non-stop for an extended time period (30 seconds, 1 minute, 2 minutes, etc.), your focus is purely on stamina. The quality of your punches gradually declines.

The **10 x 10 System** is different. This drill emphasizes quality AND quantity. The split second that you have to regroup between each 10-punch combination allows you to recover, and return with another quality combination. When you fight, your goal is to throw quality punches throughout the bout. Your technique and punch quality cannot deteriorate when fighting. The **10 x 10 System** will train you to throw fast, powerful punches in succession. When you box, you will often throw a powerful combination, then move, and then return with another combination. You will rarely have the opportunity to throw non-stop punches for more than a few seconds at a time. Your opponent will either move, counter punch, or hold.

I highly recommend this training drill. After a few sessions, you will notice that you are able to maintain speed and power throughout the drill. When you can perform 10 cycles, you will have thrown 1000 powerful punches in one training session. You will observe noticeable improvements in punch output when sparring.

If you do not have access to a heavy bag, you can perform this drill with light hand weights. I recommend 1-3 pounds. The focus of this drill is on speed and power. Do not use heavy hand weights that will slow you down.

When shadow boxing, you can also include additional combinations. I recommend straight punches on the heavy bag, because straight punches can be thrown in rapid succession without moving the bag. Hooks and uppercuts will move the bag from side-to-side. The excess movement will slow you down, which negates the purpose of the drill. When you are shadow boxing, you will not contend with the bag. You can incorporate additional combinations into the **10 x 10 System**.

5 x 20

A close relative to the **10 x 10 System** is the **5 x 20 System**. From your boxing stance, you will throw a rapid-fire 5-punch combination. You will throw a non-stop 1-2-1-2-3 (1=jab, 2=cross, 3=hook). This drill begins with 4 straight punches, and finishes with a left hook (right hook if you are a southpaw).

1. Left Jab
2. Right Cross
3. Left Jab
4. Right Cross
5. Left Hook

This drill can be used on its own, or in conjunction with the **10 x 10 System**. For example, you can begin with 5 rounds of 10 x 10, and then proceed with 5 rounds of 5 x 20. The **5 x 20 System** is excellent when fatigued from the **10 x 10 System**. You should always be able to throw a hard 5-punch combination.

Upon completing one 5-punch combination, you will reset your feet and repeat the drill. It should only take 1-2 seconds to reset. Do not exceed 2 seconds before throwing your second 5-punch combination, once again focusing on speed AND power.

Each cycle of the **5 x 20 System** consists of 100 punches (5 x 20).

Repeat this drill for 4-10 cycles. Limit your rest between cycles to less than 1-minute. As your condition improves, you can cut the rest down to 30 seconds.

Sample Session

- 1-2-1-2-3
- Reset
- 1-2-1-2-3
- Reset

Continue for 20 sets of 5 punches (100 total). Rest for 1-minute or less and continue.

I cannot say enough about the effectiveness of these explosive, short duration drills. You must explode, reset, and then explode again. These drills closely mimic the physical exertion experienced during combat. Rarely will you throw more than 10 punches at once. Working with explosive (repetitive) bouts of 5 and 10 punches will do wonders for sport-specific stamina.

Punch Intervals

Punch in a non-stop manner for an entire 1-minute interval (round). Focus on throwing fast, straight punches without stopping. You can start with 4 x 1-minute rounds. Give yourself 1-minute of rest between rounds. Eventually, you can cut your rest period to 30 seconds. You can also incorporate active rest into the break period. For example, you can perform bodyweight squats during the 1-minute rest period. As your condition improves, you will find yourself throwing MORE punches, and MORE effective punches (harder punches).

WEIGHTED GPP

Sledgehammer Training

If the sledgehammer is new to you, I recommend starting with the diagonal swing. You can handle a heavier sledgehammer with this variation.

For the following diagonal sledge swinging workouts, begin with left foot slightly forward, swinging from right to left for 10 reps, then put your right foot forward, swinging from left to right for 10 reps. Continue to alternate sides every 10 repetitions.

I recommend starting with a 10 or 12 pound sledgehammer. When you can perform 6 rounds with a 12-pound sledge, you should begin using a 16-pound sledgehammer.

Diagonal Sledge Swinging Workout (Beginner)

- 4 x 2-minute rounds – 1 minute of rest between rounds

Diagonal Sledge Swinging Workout (Intermediate)

- 4 x 3-minute rounds – 1 minute of rest between rounds

Diagonal Sledge Swinging Workout (Advanced)

- 6 x 3-minute rounds (16-pound sledge) – 1 minute of rest between rounds

Diagonal Sledge Swinging Workout (Master)

- 6 x 3-minute rounds (16-pound sledge) – 30 seconds of rest between rounds

Diagonal and Vertical Swinging Workout

- 10 diagonal swings (left foot in front, swing from right to left)
- 10 diagonal swings (right foot in front, swing from left to right)
- 5 vertical swings, right hand on top
- 5 vertical swings, left hand on top

Continue for a complete 2 or 3-minute round. Perform 4-6 rounds with 1-minute of rest between rounds.

Heavy + Light Sledge Workout

- 3 x 3-minute rounds with 16- pound sledgehammer – Diagonal swinging
- 3 x 3 minute rounds with 10 or 12-pound sledgehammer
    - Alternate between vertical and diagonal swings when swinging the 10 or 12-pound sledge. Perform 10 diagonal swings to each side, followed by 5 vertical swings with each hand position. Continue for the entire round.

Allow 1-minute of rest between each 3-minute round.

Sledgehammer Swinging and Burpees

- 20 Diagonal Swings (10 left, 10 right)
- 5 Burpeees
- Continue for 3-minutes

Rest 1-minute between rounds, perform 4-6 rounds.

Sledgehammer Swinging and Sprinting

- 20 Diagonal Swings (10 left, 10 right)
- 50 Meter sprint
- 8 Burpees
- 30 punches (shadow boxing)
- Jog (walk) back to starting point

Repeat 6-10 times

For this drill, you begin with 20 sledgehammer swings. Continue with a 50-meter sprint. Upon completing the sprint, perform 8 Burpees. Conclude by throwing 30 punches as fast as possible. Take a nice slow jog back to the starting line and continue. There is no rest between exercises. This conditioning drill will train you to fight through fatigue. Your rest period is limited to the 50-meter jog back to the starting point. You may need to walk back when first attempting this routine.

Sledgehammer + Sandbag

- 6 Sandbag Clean and Press
- 20 Diagonal Swings (10 left, 10 right)
- 50 Meter sprint
- Jog (walk) back to starting point

Repeat 6-10 times

This circuit is excellent on days when you are crammed for time.

Sandbags and Hills

When first attempting hill sprints with a sandbag, I recommend starting with a very light bag. This form of conditioning can be quite humbling. Use a hill that is between 40 and 80 meters. Anything less is too short for non-weighted sprints, anything more may be too long for weighted sprints.

Non-weighted hill sprints should consist of 8-12 sprints. These workouts will serve as an entire conditioning session. Hill sprints are excellent to develop explosive power throughout the legs and hips.

When first running hills with the sandbag, start with 2 or 4 sprints. You can then finish with non-weighted sprints.

Beginner Sandbag Hill Session

- 2 x Sandbag hill sprint
- 6 x Non-weighted hill sprint

Advanced Sandbag Hill Session

- 6 x Sandbag hill sprint
- 6 x Non-weighted hill sprint

Complete Hill Routine

JBD = Jog back down the hill

- Sprint uphill with sandbag – JBD (leave sandbag at top of the hill)
- Sprint uphill (without sandbag)
- 10 x Clean and Press – JBD with sandbag
- Sprint uphill with sandbag – JBD (leave sandbag at top of the hill)
- Sprint uphill backwards (without sandbag)
- 10 x Clean and Press – JBD with sandbag
- Repeat 3 times

Total workout consists of:

- Sandbag Sprints x 6
- Non-weighted sprints x 3
- Backward sprints x 3
- Clean and Press x 60

This workout is very intense. Do not perform this workout more than two days per week.

Car Pushing

Car pushing is similar to hill sprinting. Both forms of conditioning are extremely intense and effective.

When pushing a car, I recommend working with short duration "sprints". Push the car as fast as possible for 50-100 meters. You can repeat this sequence 4-8 times. You can finish with a longer pushing session for time.

- Push the car for 75 meters (as fast as possible)
- Rest briefly and repeat 6 times
- Finish with 8 minutes of continuous pushing (around the block or parking lot)

This workout may not seem like much, but it is very intense.

Additional Finishers

There are several other forms of weighted GPP that can be used as a finisher, or as a complete workout.

Sandbag Loading x 50 repetitions – Load a heavy sandbag onto a platform 50 times. Do not rest until you are finished. Work through this routine as fast as possible. Load the bag from side to side to develop awesome rotational power. This is an excellent finisher to any strength training workout.

Fence Jumping x 50 repetitions – Fence jumping is another excellent finisher. This routine is perfect after running sprints or intervals at an outdoor park. Try to work yourself up to 50 consecutive repetitions. Record your time. Strive for a personal best each time you perform this finisher.

Sandbag Carrying – There are several sandbag carrying variations. You can alternate between each form for a complete conditioning workout. Sandbag carrying is an excellent finisher to any workout. Below is a sample finisher.

Attempt each carry for 2 consecutive minutes. Limit rest between each variation. Strive to complete this workout with a 100-pound bag (or more).

- Overhead Carry x 2 minutes
- Curl Walking x 2 minutes
- Bear Hug Carry x 2 minutes
- Shoulder Carry (left shoulder) x 2 minutes
- Shoulder Carry (right shoulder) x 2 minutes
- Deadlift Walking x 2 minutes

Wheelbarrow Walking – Load your wheelbarrow with 200-300 pounds. Begin walking for 5-10 minutes. Work yourself up to 20-30 consecutive minutes. Wheelbarrow walking is an excellent finisher. There is nothing fancy about this style of training, just old-fashioned hardcore fun.

Farmer's Walk – I recommend using dumbbells that are heavy enough to cause exhaustion after 1-2 minutes. You can repeat the Farmer's Walk for 2-4 sets. Rest one minute between each set. Challenge yourself to continue walking until the dumbbells literally fall out of your hand. This "seemingly" easy exercise will develop awesome grip strength and mental fortitude. The key to the Farmer's Walk is to use extremely heavy dumbbells.

With so many forms of weighted GPP, how can you find time for each variation?

Variety!

The key to successful GPP is to integrate different exercises. Mix it up by using several forms of weighted GPP each month. Do not "fall in love" with one exercise. You will make more improvements in work capacity by varying exercise selection.

You can also integrate several exercises into one complete conditioning workout:

Integrated Attack #1

- Sandbag Loading x 20 (side-to-side)
- Sledgehammer Swings x 50 (diagonal swings)
- Sandbag Walking Lunges x 20 (10 steps each leg)
- Farmer's Walk (with dumbbells) x 200 feet

Repeat this sequence 4-6 times. Minimize rest between exercises. Rest 1-2 minutes between each cycle.

Integrated Attack #2

- Bear Hug Walk x 2 minutes
- Medicine Ball Underhand Jump Throw x 10
- Sandbag Throwing x 8 to each side (8 left, 8 right)
- Burpees x 10

Repeat this sequence 4-6 times. Minimize rest between exercises. Rest 1-minute between each cycle.

These workouts will do wonders for work capacity.

Sprint, Carry, and Throw

1. Sandbag Bear Hug x 100 meters →
2. Jog 100 meters (back to starting point) ←
3. Medicine Ball Throws x 100 meters →
4. Jog 100 meters (back to beginning) ←
5. Sprint 100 meters →

Repeat 4 times without stopping

Your rest is limited to the jog back to the starting line (Steps 2 and 4). Notice how there is no rest between Steps 5 and 1. After sprinting 100 meters (Step 5), you will pick up the sandbag and carry it back to your original starting point (Step 1). You will repeat this drill for 4 "rounds" without rest.

Notes: For Step 3 (Medicine Ball Throws), you will throw the ball and sprint to it for the entire 100 meters. Alternate between the Chest Pass, Overhand Throw, and Underhand Jump Throw.

Sandbag Power Sprints

This routine integrates sandbag lifting with sprint work. You will sprint 100 meters, then lift the sandbag for 10 repetitions, and then jog back to the starting line. Repeat the cycle twice (totaling 10 sprints and 2 sets of each exercise). The five exercises are listed below, in the order that they should be performed:

- Sprint x 100 meters + Clean and Press + Jog back to starting line
- Sprint x 100 meters + Side-to-Side Loading + Jog back to starting line
- Sprint x 100 meters + Deadlift + Jog back to starting line
- Sprint x 100 meters + Sandbag Rows + Jog back to starting line
- Sprint x 100 meters + Zercher Squat + Jog back to starting line

Repeat this sequence twice. Perform 10 repetitions per set for each exercise. Strive to complete this workout as fast as possible.

This workout will require less than 30 minutes of your time. There is no excuse to miss a strength and conditioning workout. This workout is one of many routines that you can use when time is limited.

SLED TRAINING

The following workout is designed for strength and conditioning. Use a heavy sled for this routine. Perform this workout as a circuit (one exercise after the other without rest), and repeat the entire sequence 3 times. Rest 1-minute between circuits.

Strength and Conditioning Circuit

- Forward dragging x 2 minutes
- Backwards dragging x 2 minutes
- Bear Crawl x 2 minutes
- Lunge Walking x 1 minute
- Alligator Walk x 1 minute

Sled Sprints

- Frontward dragging - 5 x 50 meters (20-30 seconds active rest)
- Backwards dragging - 4 x 30 meters (20-30 seconds active rest)
- Finish with 8 x 50 sprints without the sled (*wind sprint style sprinting*)

I recommend starting with 50 pounds when sprinting. Perform traditional sled dragging for active rest (walking) between sprints.

Sample Restoration Workout

- Forward Dragging x 75 meters– Repeat 3 trips with 1 minute or less between sets. I recommend 60-90 pounds, depending on your strength and bodyweight.

- Backwards Dragging x 75 meters – Repeat 3 trips with 1 minute or less between sets. I recommend 40-90 pounds, depending on your strength and bodyweight.

- Upper-Body Combination x 100 meters – Repeat 3 trips with 1 minute or less between sets.
    - Sled Bench Press x 25 meters
    - Front Raise x 25 meters
    - Rear Raise x 25 meters
    - Pec Deck x 25 meters

- Ankle Dragging x 100 feet **–** Repeat 2 trips with 1 minute or less between sets. I recommend 30-50 pounds, depending on strength and bodyweight.

Use restoration as needed to induce blood flow after an intense training session.

CORE TRAINING

I recommend complete core workouts 3-4 days per week.

Non-Weighted Core Circuit #1 – Repeat 3 times

- Knee Hugs x 20
- One Arm Plank x 20 seconds per arm
- Chinnies x 30
- Supermans x 15
- V-Ups x 15
- Plank x 1-minute
- No rest between exercises – 1 minute rest between circuits

Non-Weighted Core Circuit #2 – Repeat 4 times

- Chinnies x 30
- Knee Hugs x 20
- V-Ups x 10
- Supermans x 10
- No rest between exercises – 1 minute rest between circuits

Weighted Core Circuit #2 – Repeat 3 times

- Zercher Good Morning x 10
- Chinnies x 30
- Deadlift Turnarounds x 12
- Knee Hugs x 20
- Core Twist x 12
- V-Ups x 10
- 20-30 seconds rest between exercises – 1 minute rest between circuits

Finisher - Turkish Get-up x 5 (1 set)

Weighted Core Circuit #2 – Repeat 3 times

- Sandbag Sit-ups x 10
- Standing Wheel Rollouts x 5
- Chinnies x 30
- Deadlift Twist x 12
- V-Ups x 10
- No rest between exercises – 1 minute rest between circuits

- Finisher - Turkish Get-up x 5 (1 set)

PUTTING THE PIECES TOGETHER

"Anybody can do just about anything with himself that he really wants to and makes up his mind to do. We are capable of greater things than we realize."
-Norman Vincent Peale

I have discussed several exercises and routines. You will need a well-planned attack to successfully include each form of training. I highly recommend planning your weekly training program ahead of time. Do not attempt to create your workouts on the spot.

Plan ahead and record workouts in a training log. By planning ahead, you are better able to strategize and target specific training objectives. As an athlete, you must view your training program as a project plan. Do not arrive at the gym with no idea what you will do. Print off a copy of your daily workout plan so you can move quickly from one exercise to the next.

How Many Days Per Week

I am frequently asked how many days per week an athlete must train. I usually answer this question with a question of my own…

How bad do you want it?

As a combat athlete, you must dedicate a great amount of time towards becoming the best fighter you can be. When you enter the ring, you put your life on the line. You must understand the dangers, and train your body and mind accordingly. Combat is not a game. You are training with the intention of knocking your opponent unconscious. You must be prepared to fight through tremendous fatigue.

My advice is to train 5-6 days per week. This may seem like a lot, but if planned properly, you will remain fresh throughout the training week. Always remember, your goal in training is not to wake up so sore, that you cannot get out of bed. You are training with the intention of becoming a better athlete. There will be hard days, and light days. The week will be carefully planned to balance intensity with restoration style activities.

Training Ingredients

View each component in your weekly routine as an "ingredient". Our goal is to combine these ingredients into a recipe for success. I will outline each ingredient with recommendations for each.

First, I have provided a program that I have used at several 6-week training camps. I will review the schedule, providing logic for each selection.

Monday	Tuesday	Wednesday
Interval Training	Sparring	Non Weighted GPP
Skill Training Session	Conditioning	Weight Training
Weighted Core Training		Weighted GPP
Bodyweight Exercise		Non-Weighted Core Training
		Restoration as needed

Thursday	Friday	Saturday
Interval Training	Sparring	Non Weighted GPP
Skill Training Session	Conditioning	Weight Training
Bodyweight Exercise	Weighted Core Training	Weighted GPP
		Restoration as needed

Important Note: This schedule is just one of many weekly options. We all have unique time constraints. Find a system that works for you. Review my logic for each selection and adjust your program accordingly.

The Logic Behind This Program

During this training program, Sunday was the designated rest day. Let's review the primary components:

- Interval training was performed on Monday and Thursday. Intervals consisted of track workouts, and machine-based routines (per the 6-week program previously listed). These workouts were performed early in the morning.

- Extended skill training sessions were performed on Monday and Thursday evening. Skills were trained on a daily basis, but these days involved the longest sessions. Examples of skill work involve partner drills, mitt work, and heavy bag training. These sessions were held later in the day to allow adequate recovery from the morning interval session. It is important to be fresh during skill-based workouts. Skill training sessions emphasize technique, not conditioning.

- Monday and Thursday typically ended with a moderate intensity bodyweight program such as **Short and Sweet** from page 162. These workouts were brief, using exercises such as handstand pushups and one-legged squats. Athletes were carefully monitored to avoid over-training. The athletes must be fresh on Tuesday and Friday.

- Sparring sessions were held on Tuesday and Friday. Notice how sparring took place the day after the skill emphasis session. By doing so, the athlete could transfer the skills that were drilled on Monday and Thursday, and apply them to a live sparring situation. There is no value in skill training if you do not practice inside the ring.

- Tuesday and Friday concluded with various conditioning drills. Conditioning routines consisted of sport-specific and non-specific drills. The beginning of the camp focused more on general conditioning with exercises such as sledgehammer swinging, hill sprints, and sled dragging. As the camp progressed, more emphasis was placed on sport-specific drills such as the **10 x 10 System** (heavy bag training drill). These drills were performed after the sparring session. It is important to be fresh when sparring to prevent injury and the development of bad habits.

- Strength training sessions were held on Wednesday and Saturday. Each strength training session began with a non-weighted GPP session. Typical sessions involved various Minute Drills such as Burpee Intervals. The athletes began camp with 4 rounds of GPP, and progressed to 6 rounds, with only 30 seconds of rest between rounds. After the strength training session, the athletes ended with a weighted-GPP "finisher".

Examples included sandbag carrying, sandbag loading, car pushing, and the Farmer's Walk.

- On days when time was restricted, integrated routines were used, rather than separating GPP from the strength session (ex. **Sandbag Adrenaline** page 158 or **25 Repetition Roulette** page 105). These routines integrate strength work and conditioning.
- **Warrior Challenges** were also used occasionally to replace a strength training session. This decision was made to promote motivation and competition between the athletes.
- Complex training routines were performed on one of the two strength training days. Intensity was closely monitored, as many of the sandbag exercises (ex. Sandbag throwing) and weighted GPP movements (ex. Sledgehammer swinging) involve a plyometric component.

- Core training was performed on Monday, Wednesday, and Friday. Less intense core work occurred on Tuesday and Thursday (ex. low-intensity crunches). The more intense sessions took place every other day.

- Sled dragging was used for restoration purposes when needed. It was commonly performed on Wednesday and Saturday evening. These sessions were typically brief, and performed 3-4 hours after the strength session.

Considerations

There is no such thing as a perfect routine. We all have unique training goals and time constraints.

Despite individual differences and time constraints, it is important to include the following training ingredients.

Strength training – I recommend 2 days per week, or no more than 3. If you prefer 3 days of strength training, you should perform 2 complete sessions, and conclude the week with one of the **Warrior Challenges**. For example, you could lift on Monday and Thursday, and finish the week with a challenge on Saturday. You could perform bodyweight exercise on Tuesday and Friday.

This schedule can be used when no fights are scheduled. If you opt for 3 days per week, you can still start the Monday and Thursday strength session with non-weighted GPP, and conclude with a finisher. Tuesday and Friday could then involve interval training or hill sprints. Wednesday would be a lighter day, focusing more on skill training. Never forget the importance of skill training. Whether or not a fight is scheduled, you must keep your skills sharp.

If you do not wish to perform GPP before strength training, you can conduct interval training in the morning, and then perform strength training in the evening.

Complex Training – Plyometric movements such as medicine ball throwing and various jumping drills can supplement your strength training program. Complex training is designed for well-trained athletes. This form of training should only be used after a sufficient strength base has been developed.

Conditioning – "Conditioning" is a very broad term. Your conditioning routine should include interval style training, non-weighted GPP, weighted GPP, and various sport-specific drills (ex. **10 x 10 System**). I recommend at least 2 days per week of interval style training and/or hill sprinting. You can also dedicate 3-4 days per week to various non-weighted and weighted GPP movements.

When preparing to fight, your conditioning routine should become more intense, and more specific to your event. If you are a boxer, you need to punch. If you are a wrestler, you need to get on the mat and wrestle.

Core Training – I recommend using a combination of weighted and non-weighted core exercises. These intense core routines are best when performed 3-4 days per week. Avoid consecutive days of weighted core work. Less intense movements such as abdominal crunches can be used on non-core training days. This is not a requirement. Certain individuals prefer daily abdominal training. If you find yourself in this category, balance maintenance days with more intense core workouts.

Skill Training – No amount of lifting or running will teach you how to fight. You must dedicate considerable time towards skill training. I recommend at least 4 days per week of skill training. At least 2 of these days should include more lengthy sessions, working with a coach or partner. On strength training days, you can find time for skill training by warming up with a few rounds of shadow boxing. Practice combinations, footwork, and movement. Never underestimate the importance of skill training. Strength and conditioning work should supplement skill training, NOT replace it. Skills pay the bills!

Moving Along

Pages 192-194 provide a detailed description of a weekly program. As you will see, there are many options. Experiment and find a system that works for you. This program is designed for advanced athletes who are preparing to fight. We all have unique training objectives and time constraints. It is impossible to create one program that serves the needs of all fighters. I highly recommend that you take the time (and initiative) to map out your training program. Determine your training goals and create a plan that will help you achieve these objectives…

Monday and Thursday

Morning Session: *Interval Running or Sprint Workout*

Alternatives:

- Hill sprints (non weighted or weighted)
- Sled conditioning (not restoration)
- Machine based intervals
- Medicine ball GPP program (page 172)
- Integrated routine with sledge work + sprints (page 183)

Where is the progression?

1. Interval training will progress according to one of the following:
   - Increase intensity of each effort
   - Increase the number of intervals
   - Reduce rest period between intervals
   - Incorporate active rest into rest periods

2. Hill sprints will follow the same system of progression

3. Machine based intervals should follow the 6-week program on page 175

4. Medicine ball GPP will progress by:
   - Increase number of rounds
   - Increase the length of rounds from 2 to 3 minutes
   - Decrease the rest period between rounds

Afternoon Session: *Skill training emphasis*

Examples

- Partner drills
- Situational sparring
- One of one with coach, working on technique and strategy
- Heavy bag, speed bag, double end bag
- Defense drills with a partner or coach

*Core Training (**on Monday**)*

- Any core circuit from page 186

Bodyweight circuit

- Advanced athletes can perform a bodyweight exercise circuit. This workout should be brief, including exercises such as pull-ups, pushups, and one-legged squats.

Tuesday and Friday

Morning Session: *Rest or aerobic (Fartlek) run*

This workout schedule reserves Tuesday and Friday for afternoon sparring sessions. These days include the most intense sparring sessions. You will not want to perform strenuous training in the morning. It is important to be fresh for the evening sparring session.

Advanced Athletes: More advanced athletes can perform an aerobic running session. You must make this decision based on recuperation capabilities. Examples of an aerobic session include a 1 or 2 mile run for time. Your goal is to lower your time during each aerobic run. Another option for this day is 1-3 miles of Fartlek. You can perform aerobic running on Tuesday and/or Friday. Listen to your body and make your decision accordingly.

Afternoon Session: *Sparring*

You may dedicate more than 2 days per week to sparring. This program designates Tuesday and Friday as the most intense sparring sessions.

After Sparring: Depending on the intensity of your sparring session, you may conclude with conditioning drills. Your conditioning routine should not use the same exercises as the previous morning's interval session. For example, if you replaced Monday's interval session with medicine ball GPP, you would not want to perform medicine ball GPP again on Tuesday evening.

Examples of evening conditioning drills:

- Sport-specific conditioning (heavy bag drills, **10 x 10 System**, etc.)
- Sledgehammer work
- Medicine ball GPP
- Car pushing
- Sled work

Stick with one style of conditioning. You can use any of the previously listed conditioning drills. Adjust the intensity of the workouts based on how you feel. For example, if you have an extremely intense sparring session, you may not require additional conditioning. Always listen to your body.

Non-Sparring days: If you do not spar, increase the intensity of your conditioning routine. You can also add a bodyweight circuit.

*Core Training (**on Friday**)*

- Any core circuit from page 186 (use different circuits throughout the week)

Wednesday and Saturday

Wednesday and Saturday are devoted to strength training. There are several options that you can follow when conducting your strength training routine. Below I have outlined three possible options.

Option #1: *Non-weighted GPP + Strength training + Finisher*

Begin with a session of non-weighted GPP. You can use any of the minute drills from pages 167-171. You would then proceed to your strength workout, and conclude with a finisher such as sandbag carrying, wheelbarrow walking, sandbag loading, or any other finisher from pages 182-183.

Option #2: *Morning interval training + Afternoon strength training + Finisher*

If you do not wish to begin your strength workout with GPP, you can perform a morning interval workout. You would then perform a strength workout in the evening. You could also perform GPP in the morning, in place of interval training. This option is for those individuals who want to focus 100% of their energy towards strength training, without the pre-workout GPP component. By performing your conditioning routine in the morning, you will have all day to rest. Do not perform this option on Saturday (see below).

Option #3: *Integrated Workout*

Another option is to perform a complete workout that includes conditioning components along with the strength work. Examples include **Sandbag Adrenaline**, **Integrated Action** and **Circuit Mania** (Pages 158-160)….

Option #4: *Warrior Challenges*

You may substitute a strength session with one of the **Warrior Challenges**. You should not perform more than one challenge per week.

Recommendations For Saturday - I recommend a morning workout session on Saturday. Do not train later in the day (if possible). You can finish the week with an intense strength and conditioning workout on Saturday morning. You will then have the remainder of the day, and all day Sunday, to rest and recover.

Important Note*:* Follow a system of progression throughout your strength training program by varying sets, reps, weight, rest periods, and the use of complex training.

*Core Training (**on Wednesday**)*

- Any core circuit from page 186 (use different circuits throughout the week)

QUESTIONS AND ANSWERS

"Adversity causes some men to break; others to break records." - William A Ward

Below I have provided answers to some commonly asked questions regarding this book's content.

What size sandbag should I start with?

There are no one-size-fits-all starter kits for sandbag training. We all have unique strength so it is impossible to estimate a starter bag.

Take the time to fill individual zip-lock bags. If you are serious about your training, you will take the extra hour to construct an adjustable sandbag. You will be able to quickly determine what size is right for you.

Do you ever train with barbells?

I do train with barbells and dumbbells, but I prefer the convenience and intensity of the sandbag. Many of my favorite sandbag exercises are difficult to replicate with a barbell. A few of my favorites include Sandbag Loading, Side-to-Side Loading, and Burpee Shouldering. These exercises provide tremendous benefits and are difficult to perform with anything but a sandbag.

There is definitely nothing wrong with barbell training. I encourage the variety. Never limit yourself to one training style. I encourage a program that includes barbells, dumbbells, sandbags, medicine balls, bodyweight exercise, and more. Mix it up and have fun.

What are some other "sandbag" style lifting objects?

You can fill a Swiss ball, also known as a stability ball, with water. Fill the ball approximately ¾ full, so the water has room to swoosh back and forth. The swaying motion of the water will turn a Swiss ball into an awesome lifting device. You can perform many of the sandbag exercises with this contraption.

You can also fill a barrel or beer keg with water. Barrel lifting and keg lifting have become quite popular in recent years. The swaying motion of the water is excellent for the core.

I recommend both forms of training, although I do prefer the sandbag. The sandbag provides more benefits for grip strength, and can be used for many more exercises.

Your weekly workout program includes morning running followed by an evening training session. I work a full-time job so this is not feasible. Any suggestions?

Training in the morning requires dedication. I also work a full-time job. I once commuted 50 miles to and from work each day. I worked 10-hour days. I would run at 5:15 in the morning and make it to work each day by 7 AM. I would then leave work at 5 PM and head directly to the boxing gym. No one said that it would be easy. Set your alarm clock 20 minutes earlier and get out of bed. After you do this for one week, it will become part of your daily routine, and you will not think twice about it. By running intervals in the morning, you have all day to rest and recover before the evening training session. You can train the anaerobic energy system twice, without overtraining. I highly recommend a brief morning session. Several fighters are running intervals in the morning. What will happen when you must compete against these individuals? Will you explain to them that you could not wake up that early?

Your program recommends six days of training, followed by one day of rest. What are your thoughts about training three days on and one day off?

Taking a rest day on every forth day is a great way to stay fresh during an intense training cycle. Many athletes use this system. I created a six-day on, one day off schedule for convenience purposes. Most gyms are closed on Sunday, making it an ideal rest day. If you rest every fourth day, your rest day will change each week. I would prefer to have my fighters in the gym on the days that it is open. Three days on, one day off is a fine program if your facility is open 7 days per week.

Is it possible to maintain your training program on a year-round basis?

When you are preparing to fight, you will endure the most intense training of the year. It is not possible to maintain this intensity on a year-round basis without burning out. You should engage in a transition period after competition. During this time, you should reduce the intensity of your training sessions to allow the body time to rest and recover. You should avoid intense interval sessions and explosive plyometric exercise.

Do not leave the gym for extended periods. It takes a long time to get *in shape*. It does not take long to become *out of shape*. Deconditioning is often noticed within 1-4 weeks of inactivity. Use it, or lose it.

Transition periods between fights should be brief, consisting of less intense exercise. Notice that I use the terms “less intense” to describe your training program. I did not mention anything about “nonexistent”. Cycle your training program according to your fight schedule. Pick up the intensity when preparing to fight. After the fight, you should allow the body some time to recover with less intense exercise before starting another intense training cycle.

I would like to take a few months to focus on strength and conditioning, without competing. Any recommendations?

It is acceptable to take time off to focus on strength and conditioning, but do not lose site of skill training. Taking an occasional break from sparring and competition can be healthy for the body and mind, but do not completely neglect your skill training objectives. You can always find time for shadow boxing, heavy bag training, and partner drills.

Do you recommend interval running or machine-based intervals?

If I had to choose, I would opt for interval running on a 400-meter track. Fortunately, we do not need to choose one form of training over the other. You can integrate machine-based intervals such as stationary biking, with running, and even heavy bag interval training. Based on personal experience, I have always observed a superior conditioning effect by running intervals on the track. I highly recommend interval running in your program. Inside the ring, you will spend much of your time moving around on your feet, not on a machine. Ground based activities should be included in your program.

Find time for at least two interval sessions per week. Balance your interval training with other conditioning drills to avoid overtraining.

What is the best form of indoor conditioning during the winter?

Poor weather is no excuse to skip conditioning workouts. If it is cold, bundle up and get outside. I have been running in the cold for over 15 years. It will not kill you. If you cannot train outdoors, you can use any of the conditioning drills listed on pages 167-171. Burpee Intervals are one of the most intense conditioning drills you can perform. These Minute Drills are VERY intense. There is no excuse to miss a conditioning session. If you are strapped for time, find 10 minutes to perform a few rounds of Burpee Intervals.

Burpee Shouldering is another favorite of mine. This combination exercise will improve power and anaerobic endurance. One of the true benefits of the sandbag is its convenience. You do not need a lot of room to perform the exercises. You can always find room for Burpees and sandbag lifting. You do not need fancy training facilities or equipment.

Should I be sparring if I have no fights lined up?

Sparring is where you apply what has been drilled during skill sessions. If you are physically prepared, you can spar. Balance the intensity of your sparring sessions depending on when you are next scheduled to fight. Not every sparring session should become an all out war. If you spar hard on a year-round basis, you are destined to burn out in the gym. I have seen many gym champions who struggled during actual competition. These fighters had their best moments in the gym. Do not make this mistake. If you are a serious athlete, you will maintain your fitness on a year-round basis. If you make this commitment, you can work on less intense partner drills and situational sparring on a year-round basis. If you have been out of the gym for an extended period, get yourself in shape first before stepping into the ring.

I know that you are a proponent of bodyweight exercise. Can I train with bodyweight exercise on a daily basis, along with 2 days of sandbag training?

Bodyweight exercise is very convenient, and not as stressful to the nervous system as heavy lifting. It is difficult to answer this question with a Yes or No. Certain athletes recover faster than others. I personally perform bodyweight exercise 4-5 days per week. When I train fighters, we typically start and finish our workout with a callisthenic session. These sessions are brief, consisting of 4-8 exercises. As long as you are not continuously pushing yourself to failure on a daily basis, you can include several days of bodyweight calisthenics.

It is important to listen to your body. Adjust your workout based on how you feel. We are all unique. Make the adjustments that you deem necessary.

On a side note, do not confuse bodyweight exercise with “conditioning”. An ability to perform high repetition pull-ups, pushups, or bodyweight squats does not mean that you can maintain a high punch output during competition.

Proper conditioning programs must target the anaerobic energy systems. You must simulate the “all-out” nature of combat while training. You can achieve these objectives with sprints, intervals, sport-specific conditioning drills, and GPP. As a fighter, you need much more than “pushup prowess”. Each form of training serves a purpose. Do not overemphasize one ingredient. A complete program must be carefully balanced to accurately target each training objective.

FINAL WORD

"The average person thinks he isn't."
– Father Larry Lorenzoni

I have detailed an intense training system designed for fighters. I have illustrated several exercises and routines that promise to challenge you. There will be times when you question your ability to continue.

Champions continue, pretenders quit.

How bad do you want it?

No one wants to look back on life pondering what could have been. Live your life without regrets. Make the decision to be the best, and do not let anyone or anything stop you.

Strength and conditioning workouts will not always be "fun". To be the best, you must train the best. Combat is not a game. There are no substitutes for intensity.

Visualize your opponent in the gym. He is preparing to knock you unconscious.

What are you going to do about that?

An unknown author once said,

"*Some people dream of success, while others wake up and work hard at it*"

You decide…

NOTES

NOTES

Daily Training Checklist (Sample)

Date:

Categories	Check	Notes
Intervals	✓	Ran intervals on the track. 3 x 400, 4 x 200, 5 x 100
Strength Training		
Sport-Specific Conditioning		
Bodyweight Calisthenics	✓	Concluded boxing workout with bodyweight circuit One-legged squats, pull-ups, and pushups
Non-Weighted GPP		4 x 3-minute drills prior to boxing workout
Weighted GPP		
Restoration		
Core Training	✓	Performed bodyweight core circuit consisting of chinnies, v-ups, knee hugs, and supermans
Skill training	✓	Hit the heavy bag 6 x 3 minute rounds Hit punch mitts with trainer 4 x 3 minute rounds
Sparring		

Additional Notes:

Daily Training Checklist

Date:

Categories	Check	Notes
Intervals		
Strength Training		
Sport-Specific Conditioning		
Bodyweight Calisthenics		
Non-Weighted GPP		
Weighted GPP		
Restoration		
Core Training		
Skill training		
Sparring		

Additional Notes:

Weekly Training Checklist (Sample)							
Categories	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**	**Sun**
Intervals	✓			✓		✓	
Strength Training			✓			✓	
Sport-Specific Conditioning		✓		✓			
Bodyweight Calisthenics							
Non-Weighted GPP			✓			✓	
Weighted GPP			✓			✓	
Restoration				✓			
Core Training	✓		✓		✓		
Skill training	✓	✓	✓	✓	✓		
Sparring		✓			✓		

Additional Notes:

Weekly Training Checklist							
Categories	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**	**Sun**
Intervals							
Strength Training							
Sport-Specific Conditioning							
Bodyweight Calisthenics							
Non-Weighted GPP							
Weighted GPP							
Restoration							
Core Training							
Skill training							
Sparring							

Additional Notes:

Weekly Training Schedule

Start Date:

Monday	Tuesday

Wednesday	Thursday

Friday	Saturday/Sunday