

Features full step-by-step workout instructions

KETTLEBELL BASICS 101

**Complete Beginners
Training Manual**



**Essential
Russian
secret
to fat loss and
strength gain!**

BestKettlebellWorkout.com

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DISCLAIMER

All kettlebell exercises are safe and beneficial to your health when done correctly, this book provides instructions with every care and attention to make sure that every trainee is catered for, and all risks are minimized. However, no matter how good the instruction, it is no substitute for proper common sense. Therefore we cannot be held liable for any injury, damage to property, or other negative consequences arisen by your from your kettlebell training.

The information in this book is for educational purposes only. The ideas, concepts, and opinions expressed in this book are based on the author's personal experience, interpretation of his current study on kettlebell training, and from years of experience teaching trainees in kettlebell training. This book is NOT medical advice, nor is it intended to replace it, and the author is NOT a general practitioner.

We also recommend that you seek professional medical advice before doing any exercise to ensure suitability for your current level of fitness and conditioning, and BestKettlebellWorkout.com cannot be held responsible for any injuries incurred from performing exercises without correct supervision.

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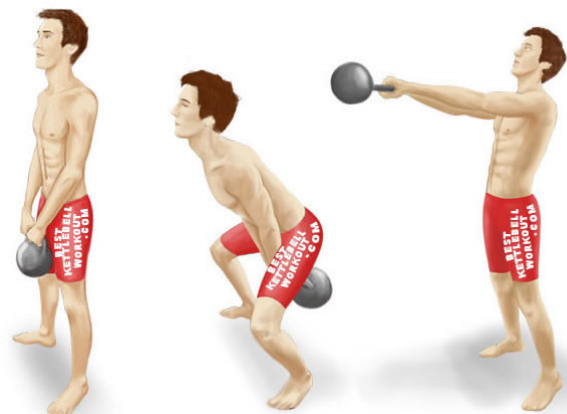
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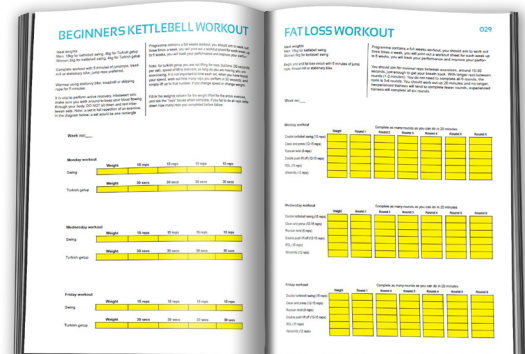
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MESSAGE FROM THE AUTHOR

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Over time this book will expand and contain more sections like diet, training tips, advanced training guidelines.

Inside this free kettlebell basics 101 book, I'm going to share the secrets on how to lose weight fast, and at the same time get leaner well toned and defined muscles. In the process of doing kettlebell workouts you will become extremely fit in the process as well.

You may have heard this already, but kettlebells have a strong reputation for being simply the best and most efficient fat burning tool, but the peculiar thing is that kettlebell workouts were never intended to be just for fat loss, for a long time kettlebell workouts were regarded as a formidable conditioning and training tool by athletes and special forces units.

Just like them you can achieve the amazing results possible by kettlebell workouts, all the information is provided to you in this book. For free.

- Kettlebell workouts are regarded as the great physique stabiliser, someone whose weak and limp to begin with can get on the programme to get nice well defined muscles. On the flipside someone whose overweight and fat can drop all the fat like it's all just dropping off during their bowel movements. But you have to put the work in. Like everything in life, work put in = results achieved. If you don't put in the work you don't get to see the results.

- Kettlebell workouts can make training fun and interesting, they're nothing like the boring cardio workout or weights routine you do in the gym. You can get a challenging, intense but fun, dynamic and engaging workout, unlike any you've probably done before. This means that you achieve the results! So many people plateau in their training or get bored and give up. Which means they never achieve their goals.

- If you're thinking "I'm too busy to work out", think again. Kettlebell workouts are portable and you can take them anywhere, you can even train inside your home, or in your garden, at the park. Hell you can even do it in the gym! The workouts are short, last a maximum of 30 minutes and can be done with it before your kids are done watching their favourite TV programme, or if you're at work, you can get a full workout in your lunch hour.

- This book isn't traded for money, it's for FREE, I'm not here to bullshit you or tell you something that isn't

true, because I might be worried that you may request a refund. I'm going to be brutally honest here. Everything I will tell you has been taught to me by professional kettlebell instructors and has worked for me, and I have trained my clients using these techniques so I know that they will give you the results you want.

I have laid out this book to be a beginners guide to kettlebell workouts, hence it being called kettlebell basics 101.

I understand there is an overload of information out there, and even books directed at beginners that detail over a hundred different exercises.

This is complete baloney, you don't need to learn hundreds of different exercises, the few basic exercises like the Swing, Turkish getup, snatch, press and windmill cover all the muscles in your body and just doing these exercises will give you a well rounded workout, which is why in the first part of this book I detail all the requirements for these exercises.

In the second part of the book I have put together a straightforward and easy to read set of instructions on how to put the exercises together to form a solid workout. You should choose your workout based on your fitness and training goals.

Over time this book will expand and contain more sections like diet, training tips, advanced training guidelines.

This book is my baby, and I'm going to keep on working on it non-stop, my dream is to turn it into a 200 page complete manual for kettlebell trainees, so make sure you stay subscribed onto the newsletter and you will receive a newer version of the book via email.

If you have any comments or suggestions feel free to email them to me at karim@bestkettlebellworkout.com
Abdul Karim Quresh

BEFORE YOU BEGIN ESSENTIALS

Nice to meet you, let's get straight to business. Over the next few pages I'll explain all the key kettlebells lifts, use them to sculpt your body to perfection!

Be prepared to change your life

You may have dabbled with various different exercise routines over the years. Clients have come to me after yo-yo dieting and start-stopping their exercises routines several times. They bounce from overweight to slightly overweight and never quite manage to hit their fitness and health goals. Finally after spending years without results, they get frustrated and call in the experts. I'll help you turn things around for good. Kettlebells will help you get your ideal body, at long last.

I will explain the key exercises with clear diagrams in the next few pages. Starting off with the swing, the mother of all kettlebell exercises. It will

lay the foundation for all other exercises. So take as much time as you need to learn it, and don't move on without mastering it.

Above all else it's recommended that you seek training from a professional for best results. There's only so much you can learn from DVDs and manuals. After dealing with hundreds of different clients, I noticed that often what they think they're doing and what they're actually doing is quite different.

After the exercises chapter, there is a workouts chapter which you can use to put all the exercises together to form a killer workout. Set your own pace, push yourself as far as you think you're able to. Don't over exert yourself at the beginning.

Ways to alter the intensity of your workouts

Weight: You can start off with a light weight and increase bit by bit. Bear in mind that kettlebells tend to jump up in 4 kilo multiples after 12KG, so it's not always possible to smoothly transition from one weight to the next.

Reps: Increasing repetitions is a more preferable way to increase intensity, normally if you have increased reps by 40% it's worth moving up in weight on the following workout.

Frequency: You should train at least two times a week at the beginning, though 3-4 is preferable when you are fit enough. Some elite trainers lift kettlebells 5 times a week.

Lever points: You can increase the intensity of certain lifts like the swing, by shortening the lever point and keeping the kettlebell close to your body by bending at the elbow. Make sure to aim for the same height [chest height] as the extended arm version.

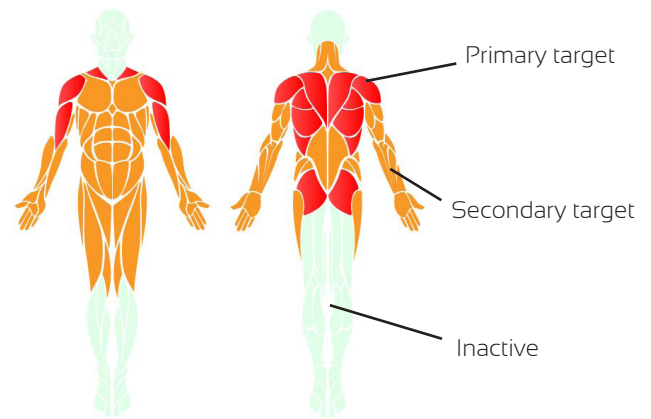
Kettlebell Tip

It's best to try a kettlebell out in person before buying, make sure you can hold the kettlebell handle with two hands side by side. Also check to see if you can hold the kettlebell by the horn upside down comfortably. Petite woman make sure the horn and handle is small enough to wrap all your fingers and thumb around and have a firm hold on. More tips can be found on the kettlebell buying page at www.bestkettlebellworkout.com



Diagrams of muscle anatomy

On the exercise pages you will find diagrams like the one on the right which will give you an idea of what muscles are targeted. Darkest colours are the primary target, lighter colours are secondary muscles and the faded areas are not targeted. Use the diagram to help identify target muscles and build your own balanced workouts that work every part of your body.



Important safety considerations

I've never had to deal with a serious kettlebell injury when working with clients, because I emphasise safety first at all times.

- As already mentioned make sure you get medical advice before performing any exercise detailed in this book.
- Practice with very light weight, and in some cases like the Turkish getup, practice with no weight until you get the technique right.
- It's a good idea to warm up using a skipping rope or a cross trainer, jogging is fine, running is not desirable as it takes too much energy out of your "tank". Running after kettlebell training is fine.
- Kettlebells don't have grips (at least they're not supposed to), bare metal can slip when hands are sweaty, using climbers chalk or weightlifters liquid chalk (my personal preference) whilst lifting, it absorbs the moisture allowing you to avoid slippery kettlebell handles.
- Never do a dead stop between lifts, it's bad for your heart, walk around to keep the blood flowing, when you're not moving the heart muscles have to do all the pumping to move blood around the body.
- Warm down immediately after kettlebell training by doing light cardio for around 5 minutes.



BEFORE YOU BEGIN SAFETY

It's important to refer to this section time after time again, doing so will hammer these instructions home and will prevent a trip to the hospital.

1

Don't lift with your back.

When doing the swing, snatch and clean, make a mental note to thrust your pelvis forward during the "climb" or upward portion, do not lift with your back. Lifting with your back will cost you an expensive chiropractor bill and a few months of agony and feeling sorry for yourself.

2

Let the abs do what they're meant to do.

Abs are support muscles not active muscles, they support the body by being a brace for your torso. So during the lifts always keep your abs firm to create a brace to support your body. Doing so will strengthen your abs, no need for crunches.

3

Give the guns a break.

Don't try to muscle up the kettlebells using your arms [read point 1] for the swing, clean and snatch. Leave the guns for the press, getup and windmill. More guys have trouble with this than girls.

4

Don't slouch.

Snap out of the slouch before you begin exercising, stand tall and firm at all times.

5

Spatial awareness.

You've checked your surroundings before exercise. But do you recheck before each rep? If you don't, you can be a risk to others and put yourself at risk too. Make sure there's ample room for "mistakes". I watched some guy on YouTube stab his plasma TV with a snooker cue after celebrating a good shot. Don't be that guy, stay away from windows, TVs and any other expensive equipment when training at home.

6

Even flooring.

Make sure you can grip the floor well, and it's not wet I don't expect your home or gym floors to be wet, but if you're training outdoors take particular note. Also take care of trip hazards.

7

Don't fight the kettlebell.

When the kettlebells moves out of control, the kettlebell rules. If you lose control of the kettlebell while lifting, and has become dangerous, just step away and let the kettlebell land wherever it may, don't try to catch it. Doing so never ends pretty.

8

Shoulder safety.

Keep your shoulders sucked into the socket when doing the press and Turkish getup. I know a few MMA fighters who have had their shoulders dislocated, once that happens your shoulders are never the same.

9

Wrists stay firm at all time.

Never bend the wrists backwards or forwards, it must always stay straight and in line with your forearm at all times.

10

Practice the movement.

Use a light kettlebells or even no kettlebells to practice the lift before your work sets. Any stiff muscles should become apparent to you. Your muscle memory will be activated to perform the lift.

11

Rest well.

Rest at least 24 hours if you're training 3 days a week or less. When exercising more than 3 days, be smart and don't perform two intense workouts on consecutive days. Match low and high, or low and medium [intensity] next to each other. If you split your workouts by body part then don't train the same body parts for at least 3 days.

12

Get a medical.

Consult your doctor before beginning any workout



KETTLEBELL EXERCISES

Learning proper kettlebell technique is paramount for effective training

On the following pages you will learn exactly how to perform the key kettlebell exercises needed for the workouts. Use them regularly as reference points for your kettlebell workouts



KETTLEBELL EXERCISES

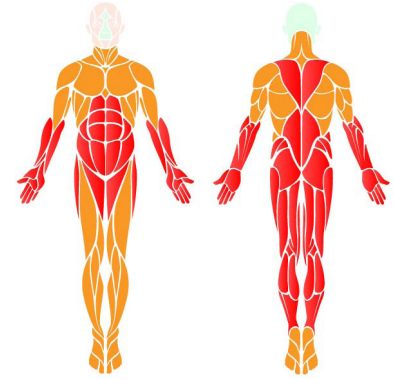
SWING

The kettlebell swing is the bread and butter of all kettlebell workouts, and makes for an intense and exhilarating workout. Kettlebell swings help develop strong posterior chain (glutes, hamstrings, back, shoulders) muscles and boosts cardio vascular endurance.

If there's one technique that you had to learn, it would be the kettlebell swing.

The kettlebell swing trains all the muscles that you would normally use for a vertical leap, except you transfer the explosive force onto the kettlebell to move it up. The kettlebell is important as it allows you to do the exercise over several repetitions and progressively increase the load, to improve your work capacity.

Because of this the kettlebell swing is a fantastic workout for improving your broad jump and vertical jump as well as your sprint, it is also a fantastic exercise to improve and assist your squat and deadlift maximum lifts as well.



TARGET: Posterior chain
(glutes, hamstring, shoulders,
back)

DIFFICULTY: low

To begin you take a wide stance, with your feet roughly 1.5 times your shoulder width, and toes pointing slightly outwards, this is important to make space for the kettlebell to swing backwards and the wide stance gives you stability during the upper portion of the lift.

Squat down with your back completely straight (do not confuse this with vertical back), and lift up the weight, [remember to keep your head straight and look across the room while you perform the exercise], squat up and stand erect with your shoulders back.



Tooltip

The target repetition for this exercise is 15, but when you first begin aim for 30 repetitions with a light weight in order to learn the technique

Note: during the swing, you do not use your arms to lift up the weight, the swing is not meant to work your arms, the arm's simple role is to act as the carrier, and a bit like a rope hanging a pendulum and does not use any force of its own.



3 To begin the movement of the kettlebell, you should squat down (pushing your hips back) until the kettlebell is well clear of your groin, and flick the kettlebell back between your legs, this is the only time you use your arms to push the weight across, to begin the momentum, the arms should not move the weight during the swing.

At this point in the swing, you should have your forearms push up against your groin and the kettlebell extending out behind you. After the kettlebell reaches its peak decline, you will simultaneously squat up and thrust your pelvis forward.



4 This will cause your back to righten vertically which causes the kettlebell to propel forward. Your kettlebell should reach your chest height. This is the optimal height you want the kettlebell to be in for the Russian kettlebell swing, for beginners this is the preferred height.

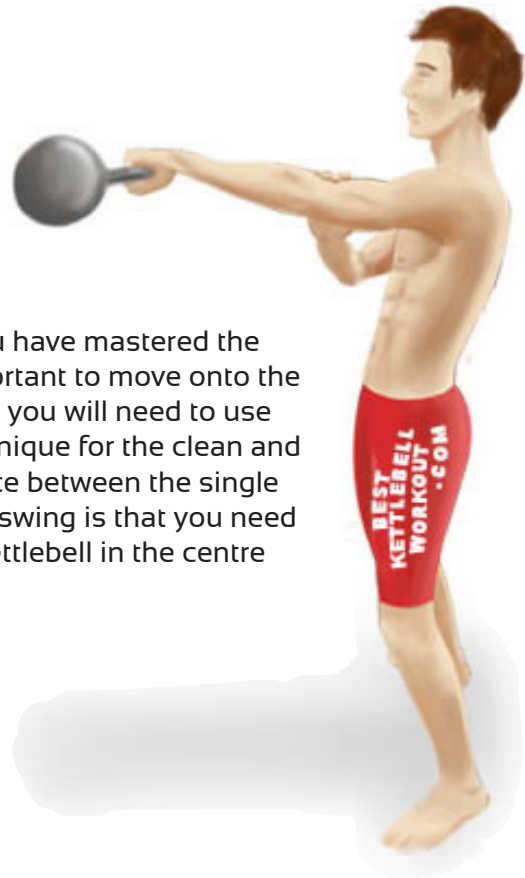
For repetitions you simply let the kettlebell fall back into its arc, while you hold the bell with your extended arms at all times, as the kettlebell lowers, you squat down slightly with your hips back and repeat again for your desired repetitions.



SINGLE HANDED SWING



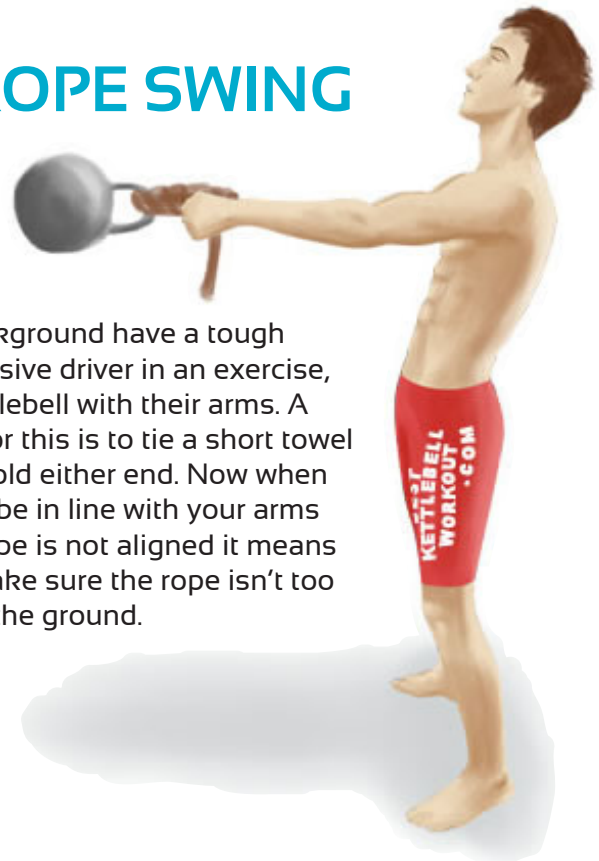
Single handed Swing: Once you have mastered the double handed swing it's important to move onto the single handed swing because you will need to use the single handed swing technique for the clean and snatch. The only real difference between the single handed and double handed swing is that you need to consciously keep the kettlebell in the centre and in its path.



Tooltip

Swapping hands: When doing the single handed swing it's possible to change hands mid swing, when the kettlebell swings up at the highest point, it will for a brief moment pause before it swings back down again, during the peak, you can change hands, but remember to practice this outdoors on grass beforehand

ROPE SWING



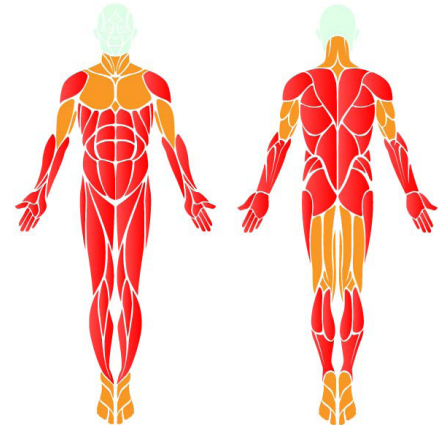
Athletes from a weight training background have a tough time allowing their arms to be a passive driver in an exercise, so tend to lat raise or lift up the kettlebell with their arms. A good technique to check yourself for this is to tie a short towel or rope around the kettlebell, and hold either end. Now when you swing the rope/towel it should be in line with your arms if you're swinging correctly, if the rope is not aligned it means you're doing the exercise wrong. Make sure the rope isn't too long that the kettlebell bangs onto the ground.

KETTLEBELL EXERCISES

TURKISH GETUP

The Turkish getup is a fantastic exercise to build shoulder muscles, and all round strength and conditioning. It's particularly useful for wrestlers, MMA fighters, BJJ and other combat athletes that use both standing and ground positions.

The Turkish getup is a freestyle type kettlebell movement which is unassumingly powerful for developing strong shoulders. It's also fantastic for your core, and combined with the kettlebell swing can make for an extremely intense workout.



TARGET: Shoulders, core, quad and calves
DIFFICULTY: medium



To begin the exercise lie flat on the floor, face up, carefully placing the kettlebell roughly 12 inches beside your right arm.



Roll onto you right, towards the kettlebell, grab the kettlebell with two bent arms. This is important, trying to lift with just one arm will damage your shoulders



Roll back onto your back firmly gripping onto the kettlebell



Gently let go of the kettlebell with the left hand, and bench press the weight up with your right hand, make sure your arms are fully vertical from the floor and elbows are locked out. From this point onwards, unless directed, the kettlebell will be held in this position.

Tooltip

Keep your back straight at all times during this lift
Practice with light weights when you first start this exercise



5

Bend your right knee and plant your foot firmly onto the ground



6

Lift the right shoulder off from the floor, sort of like doing a twisting ab crunch, supporting your weight on your opposite elbow.



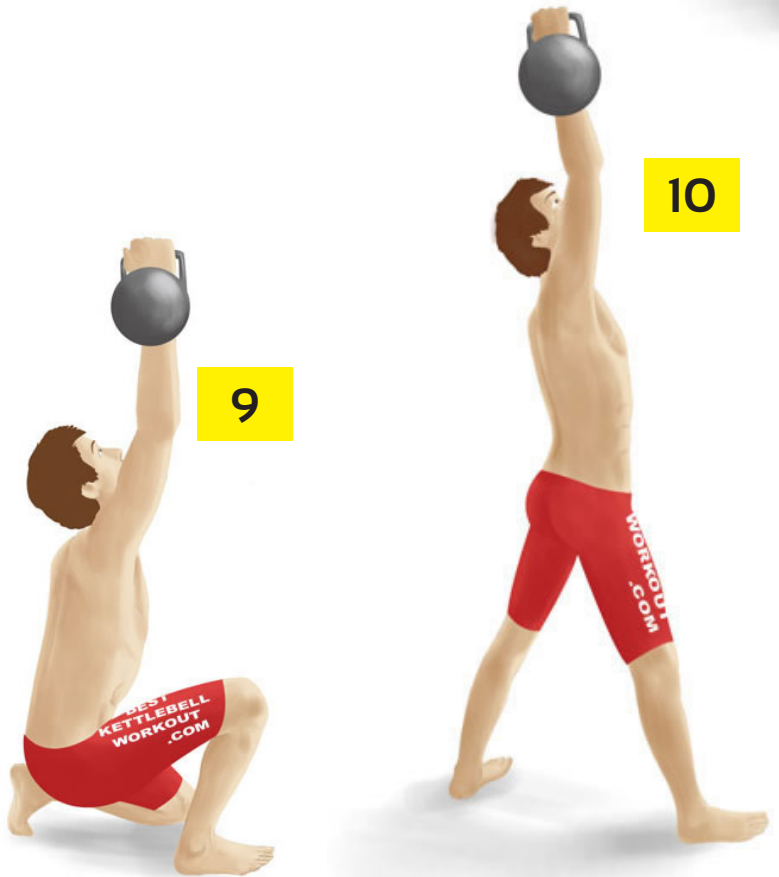
7

Pop off from your left elbow onto your hand, the hand should be slightly behind but out wide.



8

Raise your butt and extended left leg off the floor. With your left hand and right leg firmly planted on the ground, begin to pass your left leg underneath you, knee and toes on the ground.



9

10

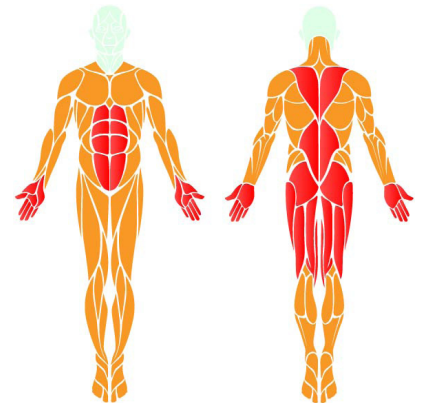
Note:
 Although this exercise is illustrated in a sequence of steps, it should be performed in one smooth movement. Keep your eyes on the kettlebell at all times.

Stand up, hold the position, and then reverse the process to sit back down

KETTLEBELL EXERCISES

CLEAN

The purpose of the clean is to quickly lift up the kettlebell up in front of your shoulders, resting it on top of your forearm [4], in order to perform front squats or the kettlebell press. Unlike barbell cleans, the kettlebell clean is not an exercise in its own right, but is essential to learn in order to perform the other lifts.



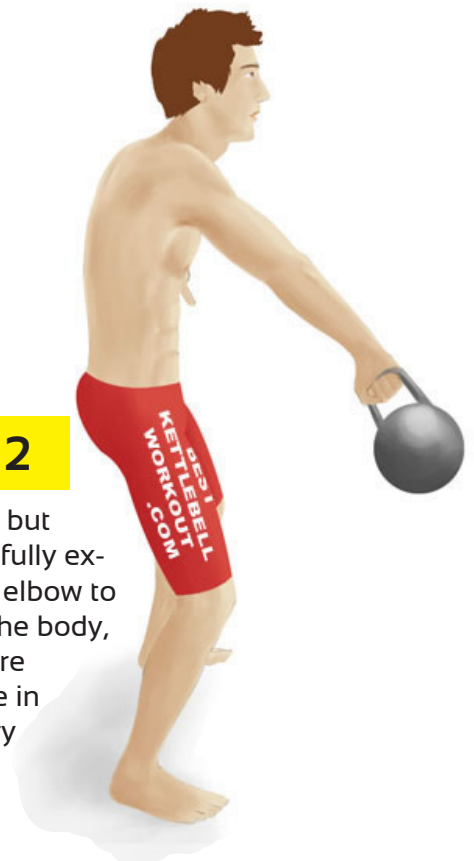
TARGET: Hamstrings, glutes, core and lower back
DIFFICULTY: medium-low

1



You begin in the dead lift position with the kettlebell in-between your legs, the clean is a fast movement, and you should be practically doing a vertical jump on the spot, but instead of jumping up the energy should be transferred onto the kettlebell causing it to propel up.

2



You drive up the kettlebell but instead of the arms being fully extended they're bent at the elbow to keep the weight close to the body, the arms do not lift, they are passive and are like a rope in the move, they simply carry the weight.

Power Tip

However, before you begin to learn how to do the clean, you must learn to lower the kettlebell from the rack position, with two arms place the kettlebell in the rack position [4] and then maintain the rack position with one arm and use the other arm to carefully push the kettlebell over the holding hand and then lower the weight back to the dead lift position, and then onto the floor.

Repeat the descent several times, until you get it right, and then practice the ascent of the lift.

**3**

When the kettlebell reaches your chest height, you must then quickly tuck your arms underneath the kettlebell in order to lock it into position.

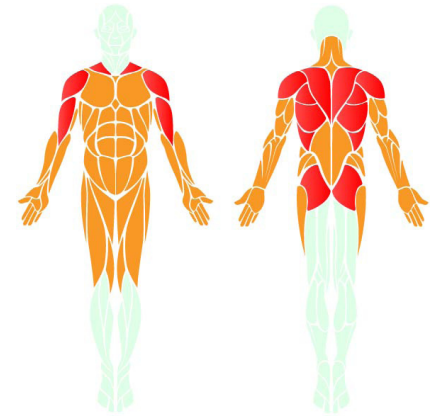
**4**

This is the final position. It is called the racked position (or clean position), note how the wrists are straight, in that the forearm and hand are in light, it's important to keep that position for safety.

KETTLEBELL EXERCISES

PRESS

The kettlebell press is a great exercise to build formidable shoulder strength, to perform the press you must begin from the rack position, achieved by doing the kettlebell clean.



TARGET: Shoulders, lats, bicep
DIFFICULTY: medium-low



1

You start off in the rack position, your body must be tense, shoulders down, elbows tucked in and latus (back muscle) out wide, your abdominal muscles must be tight to provide support around your waist, the glutes tense and the knees fully locked out. You must not try to propel the kettlebell up with your legs.

Although the body from shoulders down does not lift the kettlebell in the press, it has an important role in creating a solid base for the shoulders to lift the kettlebell.

2

From the rack position, rotate the shoulders out so the forearms are vertical and the back of your hand is facing behind you



Variation in the kettlebell press

The bottom up press: You can press the kettlebell upside down to challenge your grip even more, you must grip the handle super tight, to stop the kettlebell from falling sideways, be careful not to drop the weight on top of you and use a light weight to begin. You may need to use chalk to get a better grip



3

In the kettlebell press the kettlebell follows a banana shaped arc, where it gets lifted outwards and then up. Remember to always suck in your arms into your shoulder socket throughout the lift



4

Lift the kettlebell up aiming to get to a full lockout of the arm and completely vertical.

Further pointers for performing the kettlebell press

At the rack position lower shoulders down as much as possible, so the muscles around the shoulders are stretched, this allows the muscles to load up and get better leverage to perform the kettlebell press. Your elbows should touch your hip bone at the stretched out position.

Flare out your lats (back muscles) so they stretch outwards, doing so provides the shoulders more stability, and helps with the lift. The lats are the secondary work muscle in the kettlebell press.

Grip the handles as hard as possible, this allows you to have more control of the kettlebell, and helps engage the arms in the lift.

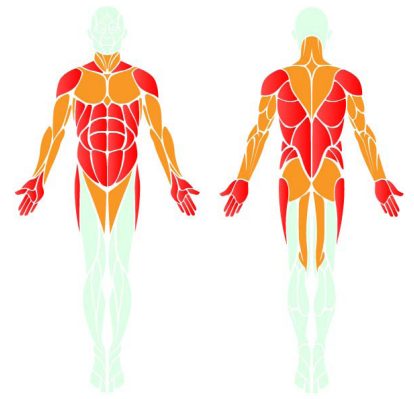
When pressing the kettlebell, mentally focus on your shoulders and latus to drive the weight up, the shoulders and lats are the main movers in this lift, not the biceps.

Instead of trying to focus on lifting the kettlebell, focus on driving yourself into the ground (away from the kettlebell), this helps to lift better for some reason.

KETTLEBELL EXERCISES

WINDMILL

The windmill is a fantastic exercise to build oblique strength and flexibility; it's regarded more as a support exercise. In order to learn it, it's best if you practice without any weight to begin with. Begin by standing shoulder width apart, and toes pointing slightly out.



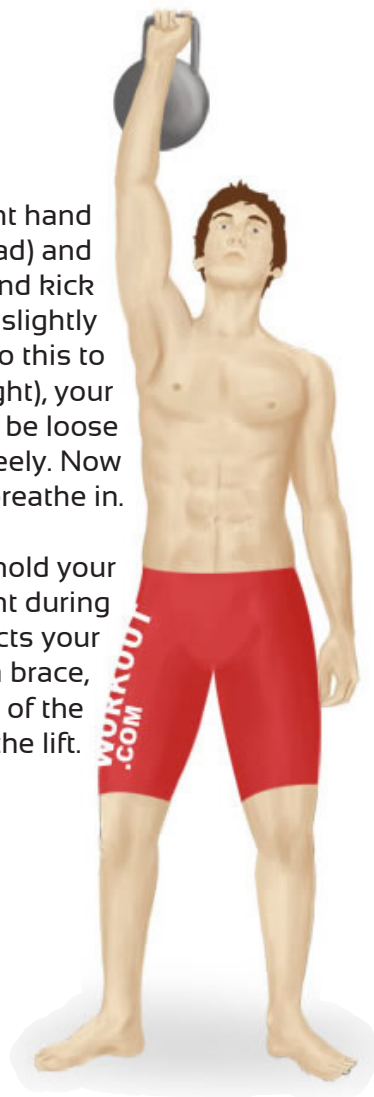
TARGET: Core, lats, obliques and shoulders

DIFFICULTY: medium

1

Raise the right hand vertical (overhead) and locked out, and kick the left hip out slightly (important to do this to balance the weight), your left hand should be loose and dangling freely. Now breathe in.

Breathe in and hold your abdominals tight during the lift, it protects your back by giving it a brace, do not let go of the brace during the lift.



2

Look up at the kettlebell/hand, and bend at the hips towards the left, glide your left hand down your thigh, to act as a guide. Towards the bottom of the movement the left leg may bend a little, this is absolutely fine. The right leg should always be locked out.

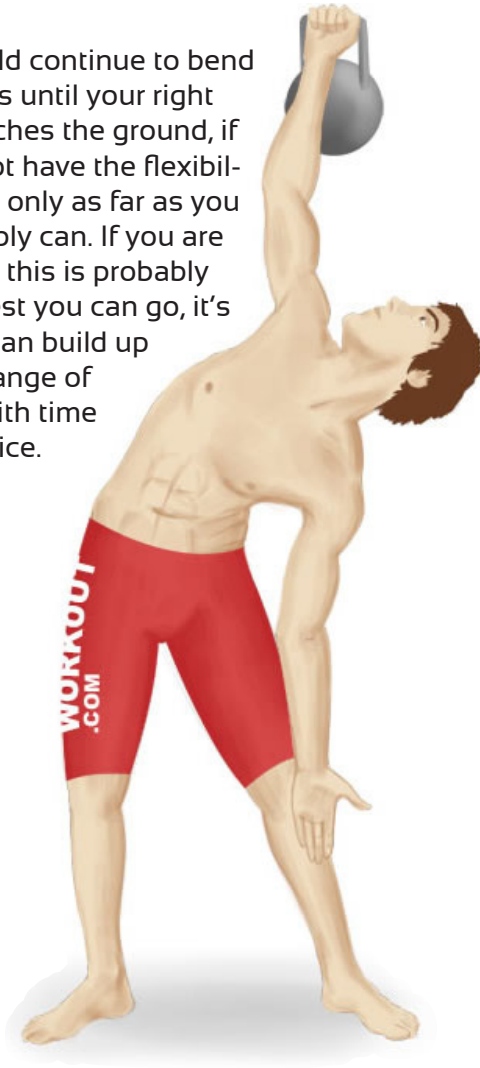


Note:

This exercise is more difficult than it appears, make sure you do a few runs without any weight, you are ready to start using a kettlebell, remember start off super light, using aerobics weights and increase to a challenging weight gradually.

3

You should continue to bend at the hips until your right hand touches the ground, if you do not have the flexibility yet, go only as far as you comfortably can. If you are inflexible, this is probably the farthest you can go, it's fine you can build up on your range of motion with time and practice.



4

This is the ideal position, you should aim for. Squeeze your glutes (buttocks) and breathe out on the way up, and repeat for repetitions.



Safety

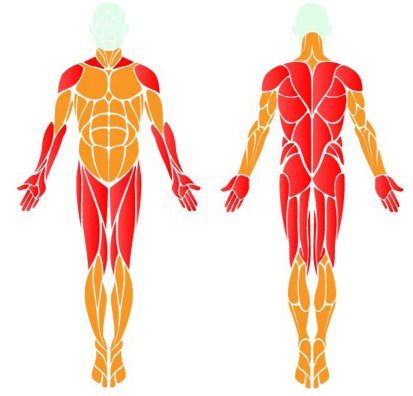
It's important to work your way up to the weight kettlebell windmill exercise, many people have pulled their oblique muscles during the lift, and then jerked and dropped the overhead kettlebell on their head. Practice caution with this exercise.

Pro Tip

When performing the exercise you bend to the side and slightly forward, never backward.

KETTLEBELL EXERCISES

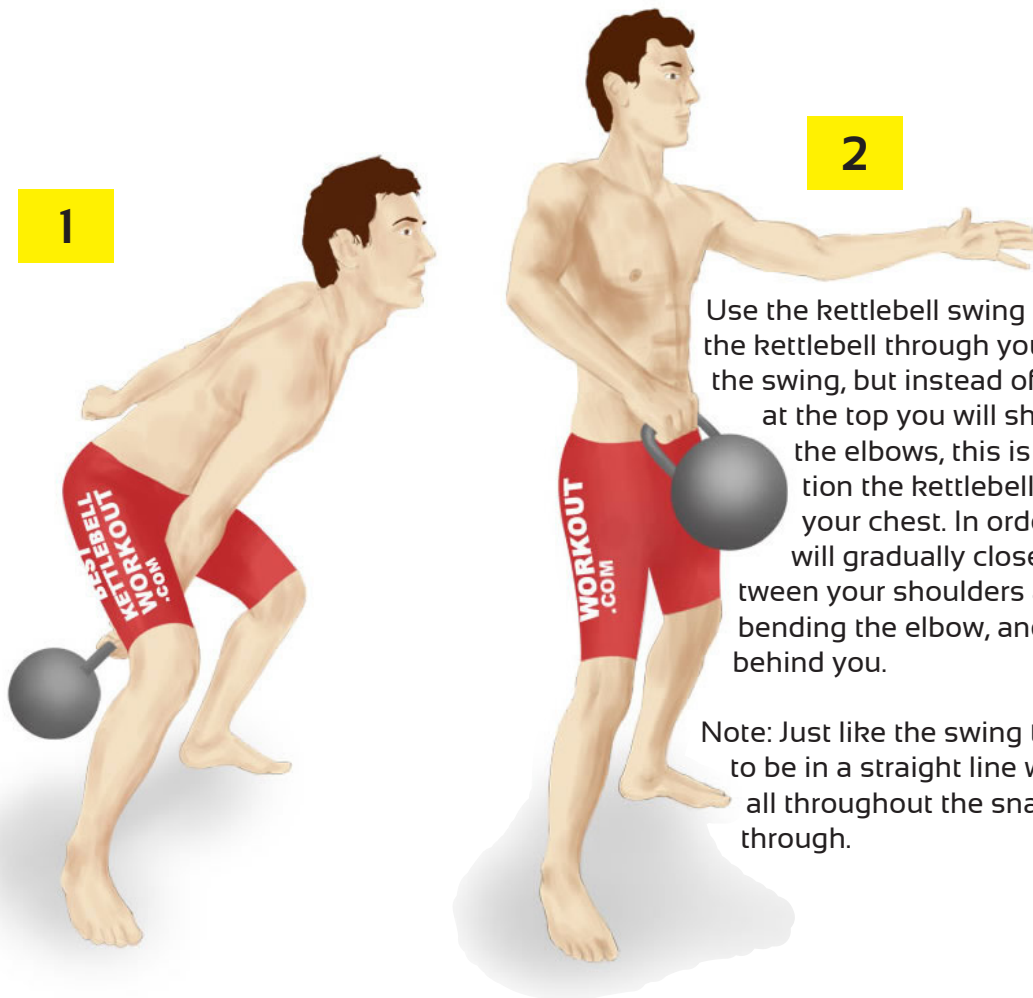
SNATCH



TARGET: Thighs, glutes, back, shoulders, forearms
DIFFICULTY: hard

The kettlebell snatch is one of the most difficult moves to get right, and should only be attempted after mastery of the kettlebell clean; the lift basically involves lifting the kettlebell from the ground to the overhead locked out position in one move.

The most challenging part of the kettlebell snatch is getting the punch through at the end of the move right; so that you can position the kettlebell behind your wrist without banging and bruising it.

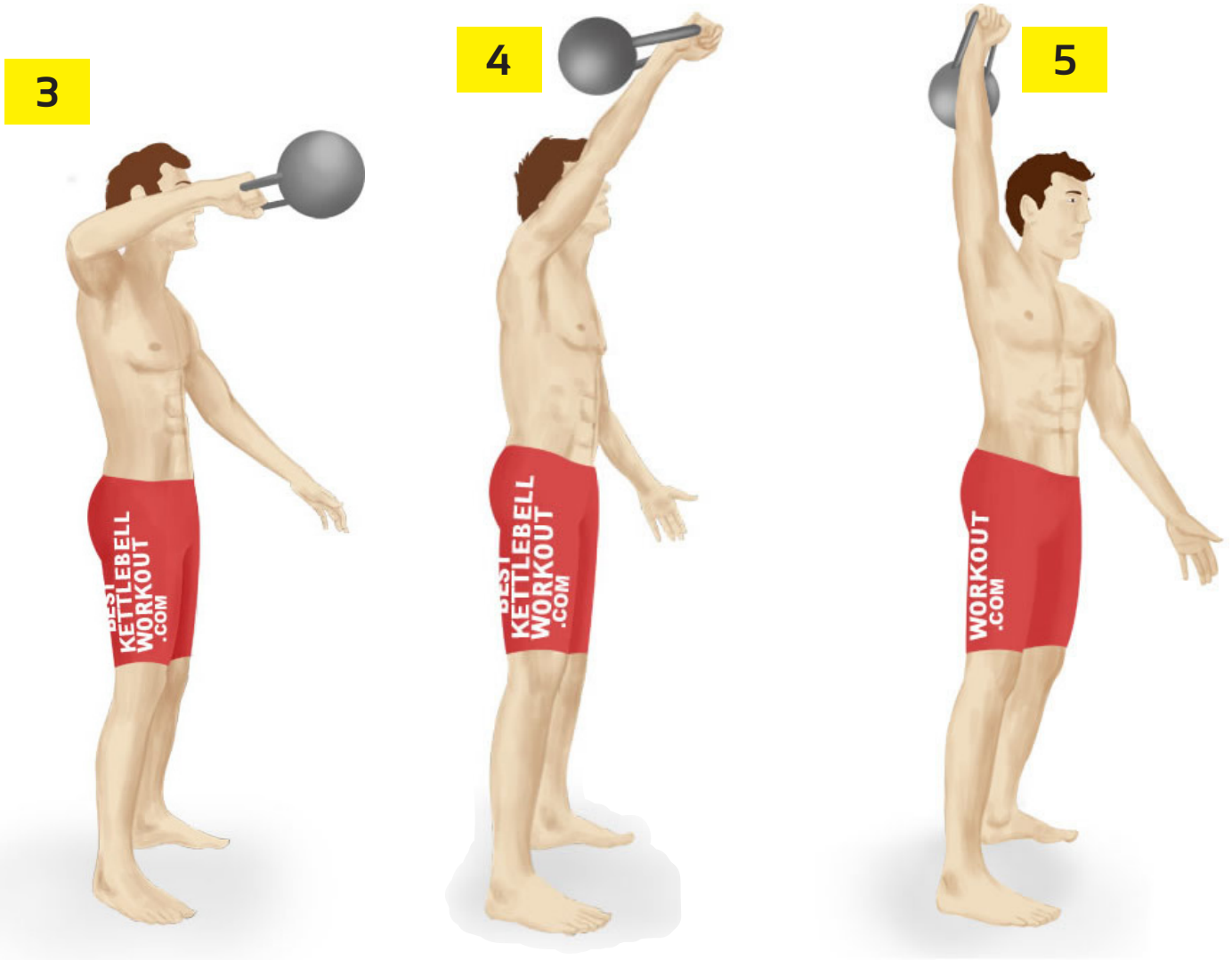


1

2

Use the kettlebell swing technique, hike pass the kettlebell through your legs and perform the swing, but instead of fully extended arms at the top you will shorten it by bending at the elbows, this is done in order to position the kettlebell just a foot in front of your chest. In order to achieve this you will gradually close the distance between your shoulders and the kettlebell by bending the elbow, and pointing the elbow behind you.

Note: Just like the swing the kettlebell needs to be in a straight line with your forearm, all throughout the snatch until the punch through.



3 When the kettlebell reaches the chest height, you will reverse pull the kettlebell using your shoulders and your latus, do not try to strong arm the kettlebell, you will wear your arms out.

4 When the kettlebell goes just higher than your head, you need to begin the punch through to extend and lock out your arms to complete the lift. Timing is crucial here, and the secret to not banging the kettlebell onto your arm is to not let it fall on the back of your arm, but rather to punch through with your arm. A mistake a lot of people make is they leave it until too late for the punch through and the kettlebell is already too high, and must fall down and bang on your wrists.

Note: If you are leaving the punch through too late, you may need to revise your technique and gradually punch through sooner.

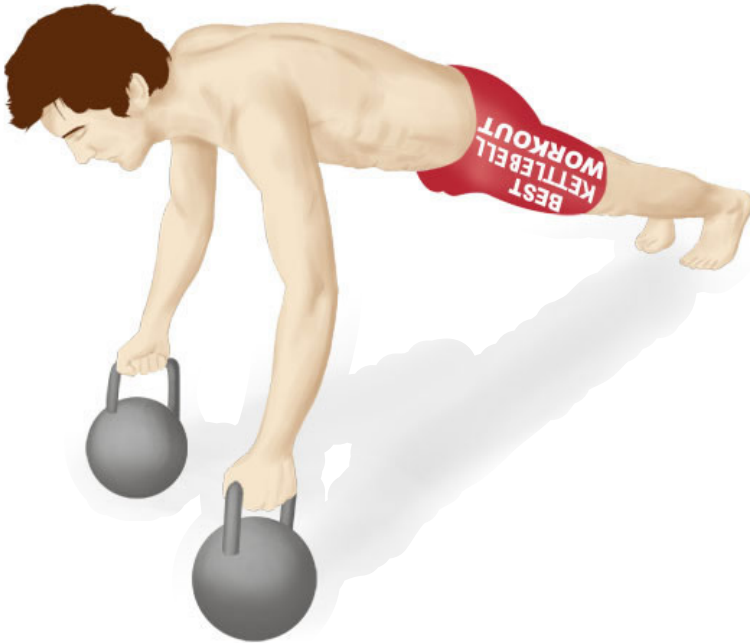
The correct time to punch through is when the kettlebell is at 0 gravity, where it's stopped going up, there is a slight pause, before it's about to go down, do the punch through. When you punch through correctly the ball of the kettlebell stays in the same position as before the punch through, and it seems like only the handle has changed from bottom to top. Effectively there has not been any descent of the kettlebell, therefore no banging.

5 You may need to practice this technique several times over in order to get this right, to prevent excessive bruising, use a very light weight to perfect the technique.

KETTLEBELL EXERCISES

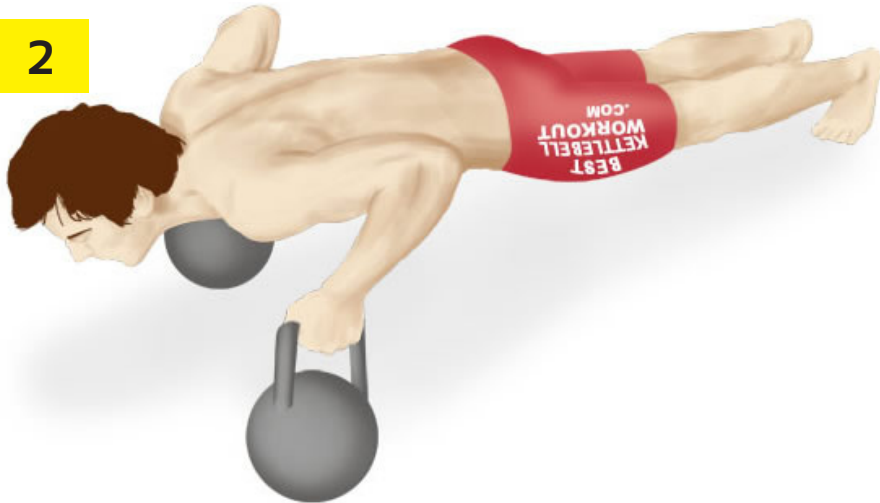
PUSH PRESS

1



1. You must begin the exercise in the push up, position your body like a plank, facing the floor with your arms vertical off the floor supporting your weight. However instead of having your hands on the floor, you will grab the kettlebells by the handle and balance your weight on top
2. Begin by performing a push up, getting your chest as close to the floor, and pushing away
3. From the top position, lift one kettlebell off the floor, while balancing your weight on the other kettlebell, sticking your elbows behind you, and wrist close to the side of your abdomen
4. Lower the weight back down to the original position, do another pushup and lift the other kettlebell

2



3



KETTLEBELL EXERCISES

SINGLE LEG RDL

1



2



1. Stand with your feet shoulder width apart, pick up a kettlebell with your left hand.
2. Begin the move by lifting the right leg behind you, keeping your leg straight, simultaneously lean forward, maintaining a natural balance
3. Lower yourself down to a comfortable stretch, and then go backwards into your standing position again

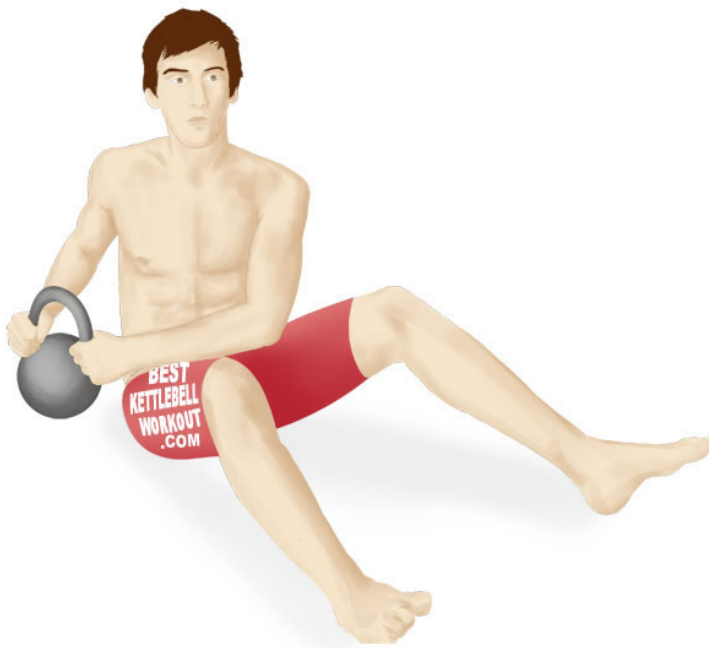
3



KETTLEBELL EXERCISES

RUSSIAN TWIST

1



2



1. Lie down in the situp position with a light kettlebell to your side
2. Keep your legs slightly bent
3. Pick up the kettlebell from your side and perform a twisting motion carrying the kettlebell to the opposite side and back again
4. Go as far back as you comfortably can without over extending

Note

Make the movement slow and controlled



KETTLEBELL WORKOUTS

Learning proper kettlebell technique is paramount for effective training

On the following pages you will learn exactly how to perform the key kettlebell exercises needed for the workouts, use them regularly as reference points for your kettlebell workouts



KETTLEBELL WORKOUTS

BEGINNERS WORKOUT

The beginners workout is perfect for male and female trainers who are working out with kettlebells for the first time or starting exercise after a long time off

Clothing

To train using kettlebell you will need to wear loose clothing, preferably a pair of shorts that will give you full range of motion to moves your legs around, and a t-shirt.

Footwear

Many kettlebell enthusiasts like to train barefoot; others wear vibram five fingers which gives them all the benefit of barefoot without the discomfort of stubbing your feet on uncomfortable surfaces. If you decide to wear shoes, wear flat soled shoes like converse all stars. Shoes with uneven soles or cushiony/spongy soles should be avoided. The reason for this is with kettlebell workouts you need to have close contact with the ground for stability, and shoe which obstructs your feel of the ground is undesirable.

Kettlebell Weight

Men: 16kg for kettlebell swing, 8kg for Turkish getup

Women 8kg for kettlebell swing, 4kg for Turkish getup

These weights may not seem like a lot, but with active recovery, it will be challenging for beginners to complete the work. Additionally it's important to start off with a light weight in order to learn the technique. Use particularly light weights for the Turkish getup when starting out.

The Workout

4 sets of kettlebell swings @ 15 reps

4 sets of Turkish getups @ 30 seconds each set, alternate hands between reps

This workout should take no more than 20 minutes to complete; you will need a 2 minute warm-up before exercise and follow 1 minute active recovery in-between sets, you will then do a brief cool down of 3-4 minutes at the end of the workout, all using a jump rope.

Your main focus is not to plough through the exercises at high speed; you should take your time to do the exercises after plenty of recovery, and with attention to your technique. This is particularly the case with the Turkish getups.

Active Recovery

It's important to perform light intensity anaerobic activity like jogging, dynamic stretching, stationary bike or whichever you prefer and have access to. They help to increase blood flow which delivers oxygen to muscle cells and clears up lactic acid build-up. Its secondary goal is to aid the heart in pumping blood around the body, sitting still in-between sets makes it tougher on the heart to pump blood around the body.

KETTLEBELL WORKOUTS

FAT LOSS WORKOUT

This workout is perfect for people whose main goal is to lose fat, the relatively low weight and high repetition workout is ideal if you do not want to gain muscle tone.

The main focus for kettlebells is the full body workouts, the whole body moves as one and there are no isolation movements, this makes for far quicker and more intense workouts. Perfect if you have a busy life.

Tools Required

Women: 8kg pair of kettlebells

Men: 16kg pair of kettlebells

(This is probably right for the majority of beginners, give or take depending on your experience)

Medicine ball, approximately 5kg, you can improvise with weight plates, or water bottles (1 litre is approximate 1 kg)

You will need an open space, somewhere that if you were to drop the kettlebell it will not cause any harm and free from children or pets.

Directions

Repeat this circuit 4 or 5 times, ideally work out 3-4 times a week, but the minimum should be twice a week. Exercise directions provided below, if none given then the exercise directions can be found in the previous chapter

The Workout

1. Double handed kettlebell swing

Target reps: 15

2. Clean and press

Target reps: 12-15 each arm

3. Russian twist (legs straight)

Target reps: 8 repetitions each side.

4. Double push-up lift off

Target reps: 12-15 reps each side

5. Single leg RDL

Target reps: 15 reps each side

6. Windmills

Target reps: 12 reps each side

KETTLEBELL WORKOUTS

SNATCH TEST

The 10 minute snatch test is a gruelling, intense and stomach churning workout that challenges both your physical abilities and your mental strength.

In fact the exercise has been selected specifically by the Russian Special Forces units in order to push recruits to the limit to weed out weak individual and separate them from the mentally strong.

You can do this workout to test your fitness and mental fortitude, the goal is to perform as many snatches as possible in the 10 minute time slot. Count your full repetitions and repeat the snatch test every month to see how much you have improved.

The standard for men is to use the 24kg kettlebell for the snatch test, and 16kg for women.

Obviously if you're not strong enough to use these weights, start off light and build your strength up, if you're already strong, then more power to you.

Notes on performing the snatch test

1. Learn correct snatch technique
2. Remember that when you are tired, you lose concentration and can let the technique slip, always have the technique at the top of your mind
3. You will start to get very tired around 3-4 minutes time, and it will get progressively harder until 7 minutes, when the pain plateaus, and then you get used to it. So if you're tempted to quit, don't.
4. Although this may sound contrary to point 3, don't stare at the clock, get someone else to time you, or set a timer to go off in 10 minutes, your focus should be on each lift, zone into the now, and forget about time left, focusing on the time left will break you.
5. Find a pattern of hand switch that works for you, I like to change hands every 10 reps, it always helps with my counting if I count in blocks of 10.

KETTLEBELL WORKOUTS

MMA WORKOUT

Kettlebell workouts are used extensively in MMA training as they allow trainers to closely mimic the physical requirements of MMA very well. It gives athletes the perfect balance of anaerobic workout and strength conditioning ideal for MMA, allowing fighters to build strength that will last throughout the course of a fight.

In addition to this the versatility of kettlebell training allows you to focus in target muscle groups to specifically training for certain movements such as the takedown, ground game from top or bottom positions and the clinch. It can even help improve your striking with the ballistic movements of kettlebell training like the snatch and jerk which allow you to punch and kick faster and harder.

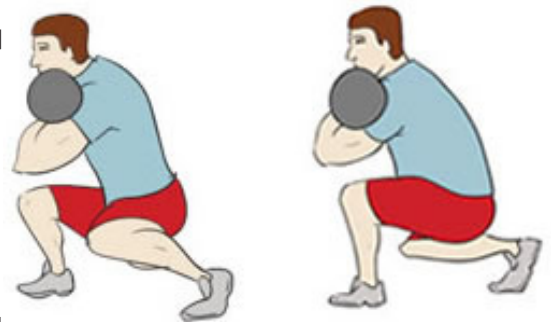
This workout should be considered a beginners routine as it will focus on building strength and endurance for basic moves, at an advanced stage it's possible to target very specific movements such as the hip turn to improve hip rotation for the muay thai kicks and the cross. The simplicity of the kettlebell always makes it very versatile and can be easily tailored to achieve highly specialized training goals.

These explosive movements should be done at the beginning of your workout when you have plenty of energy. Aim to do 3 sets of one of these exercises on one given day at the start of the workout.

Exercise 1 - Kettlebell Duck Walk

The duck walk is utilized by freestyle wrestlers to build exceptional takedown strength, this works both the large and small leg muscles and is a great exercise to do to balance any left/right imbalances in muscle strength.

Do the duck walk for 1 minute using the same weight you would use for your kettlebell swings, to begin start from a standing position and clean the kettlebell up to your shoulder height. Then perform 1 minute of slow, steady nonstop kettlebell duck walk.



You grab two kettlebells and get into the rack position, then you squat down low until your thighs are touching your calves, while balancing on the balls of your feet, walk up and down, you should waddle like a duck as you walk, stay low

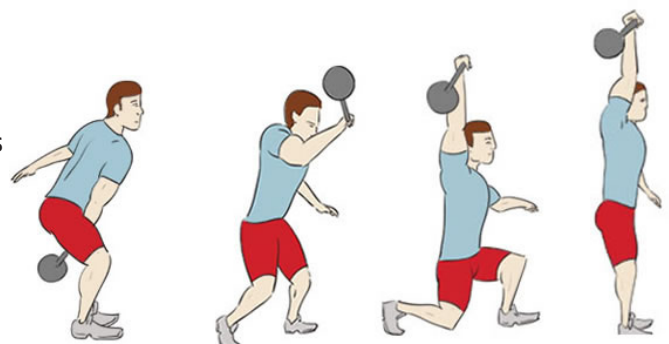
Working sets: 3 sets @ 1 minute each

The kettlebell split jerk is a lot like the split snatch, and it cannot be stressed enough for these exercises to work as they should you must visualize trying to get yourself under the kettlebell rather than lifting the kettlebell up.

Exercise 2 - Kettlebell Split Snatch

Explosiveness is crucial for takedown as it is the source of power and more important the element of surprise, the reason why George St. Pierre's takedowns are so effective is for both of these reasons.

The kettlebell split snatch trains the explosiveness very well. The split snatch goes as follows, start off with the kettlebell between your legs on the ground, squat down with your back straight and bum sticking



out, now snatch the kettlebell up, but unlike the traditional kettlebell snatch, instead of punching through after the high pull lunge forward, so you're effectively pushing yourself under the kettlebell rather than lifting it up.

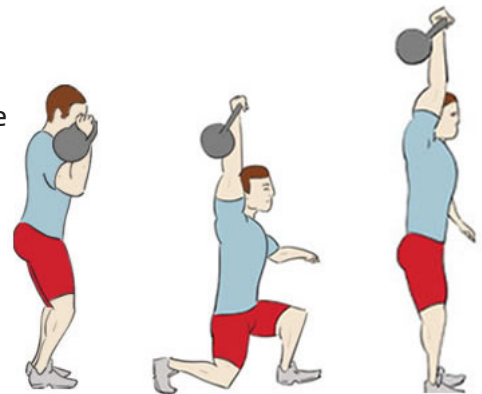
The exercise is very effective for building explosiveness. You should aim to do reps of 3 to 5, but no more than 5. Explosiveness is more about snap strength rather than endurance, and doesn't quite work if you're tired.

Note: Learn the snatch technique first

Exercise 3 - Kettlebell Split Jerk

To perform the split jerk, get the kettlebell up into the clean position, also known as the rack position. Bend your legs slightly so dip down maybe 2 inches, now in a fast motion as if you were pushing yourself away from the kettlebell, push the kettlebell up at the same time get into a deep lunge position. Next stand up to complete the rep.

The split jerk is slightly easier than the split snatch so aim to do a couple reps more than the snatch.



BEGINNER'S KETTLEBELL WORKOUT

Ideal weights

Men: 16kg for kettlebell swing, 8kg for Turkish getup
Women 8kg for kettlebell swing, 4kg for Turkish getup

Complete workout with 5 minutes of jumprope, treadmill or stationary bike, jump rope preferred.

Warmup using stationry bike, treadmill or skipping rope for 5 minutes.

It is vital to perform active recovery, between sets make sure you walk around to keep your blood flowing through your body, DO NOT sit down and rest between sets. Note: a set is full repetition of an exercise, in the diagram below, a set would be one rectangle box

Programme contains a full weeks workout, you should aim to work out three times a week, you will print out a workout sheet for each week up to 6 weeks, you will track your performance and improve your performance each workout

Note: for turkish getup you are not lifting for reps, but time (30 seconds per set), speed of lift is irrelivent, as long as you are moving you are exerciseing, it is not important to time each set, when you have found your speed, work out how many reps you perform in 30 seconds, and simply lift up to that number, if you change speed or change weight, retime yourself to work out your 30 second reps again.

Fill in the weights column for the weight lifted for the entire exercise, and mark off the "reps" boxes when complete, if you fail to do all reps write down how many reps you completed before failure.

Week no: ____

Monday workout

	Weight	15 reps	15 reps	15 reps	15 reps
Swing					
	Weight	30 secs	30 secs	30 secs	30 secs
Turkish getup					

Wednesday workout

	Weight	15 reps	15 reps	15 reps	15 reps
Swing					
	Weight	30 secs	30 secs	30 secs	30 secs
Turkish getup					

Friday workout

	Weight	15 reps	15 reps	15 reps	15 reps
Swing					
	Weight	30 secs	30 secs	30 secs	30 secs
Turkish getup					

FAT LOSS WORKOUT

Ideal weights

Men: 16kg for kettlebell swing
 Women 8kg for kettlebell swing

Begin and end fat loss circuit with 5 minutes of jump rope, thread mill or stationary bike

Programme contains a full weeks workout, you should aim to work out three times a week, you will print out a workout sheet for each week up to 6 weeks, you will track your performance and improve your performance each workout

You should aim for minimal reps between exercises, around 15-30 seconds, just enough to get your breath back. With a longer rest between rounds (1-2 minutes). You do not need to complete all 6 rounds, the norm is 3-4 rounds. You should work out up 20 minutes and no longer, inexperienced trainers will tend to complete fewer rounds, experienced trainers will complete all six rounds.

Week no: _____

Monday workout

Complete as many rounds as you can in 20 minutes

	Weight	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6
Double kettlebell swing (15 reps)							
Clean and press (12-15 reps)							
Russian twist (8 reps)							
Double push lift off (12-15 reps)							
RDL (15 reps)							
Windmills (12 reps)							

Wednesday workout

Complete as many rounds as you can in 20 minutes

	Weight	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6
Double kettlebell swing (15 reps)							
Clean and press (12-15 reps)							
Russian twist (8 reps)							
Double push lift off (12-15 reps)							
RDL (15 reps)							
Windmills (12 reps)							

Friday workout

Complete as many rounds as you can in 20 minutes

	Weight	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6
Double kettlebell swing (15 reps)							
Clean and press (12-15 reps)							
Russian twist (8 reps)							
Double push lift off (12-15 reps)							
RDL (15 reps)							
Windmills (12 reps)							



DIET & NUTRITION

Exercise is only half of the picture, to get the most out of your training, learn to eat correctly

On the following pages you will find key nutrition and diet information to assist you in your fat loss and fitness goals



DIET & NUTRITION

PROTEIN

Protein is absolutely essential for tissue growth and repair, because they contain essential amino acids which are building blocks for all cells in your body. When you train with kettlebells, you will go through a cycle of cell damage and then regrowth which will build your muscles up stronger. For this process it's important for you to consume high protein foods to facilitate recovery and growth.

Protein is a nitrogen containing compound and it can be found in all animals and many vegetables. The nitrogen is packed inside amino acids and because of that the amino acids are essential for growth and repair. There are a total of 20 amino acids in total, 9 of which are essential in dietary requirements, the remaining 11 can be produced by the body itself.

The essential amino acids required from diet

Note: There are technically 9 amino acids, but one of them (histidine) are only required for children. For our use we will consider the following 8 as essential amino acids.

Isoleucine	Stablizes and regulates blood sugar and energy levels
Leucine	Prevents excessive breakdown of muscle tissue after exercise or injury
Lysine	Regulates nitrogen balance
Methionine	Required for make choline, and essential for building cystine and taurine
Phenylalanine	Aids memory and treats depression
Threonine	Required for building collagen, elastine and tooth enamel protein
Tryptophan	Essential for producing serotonin and is a sleeping aid.
Valine	Metabolised to produce energy

When you train, your body's need for amino acids increases, and therefore you must consume high quality protein rich foods to supply your body with its need. If you fail to do so, the body will cannibalise amino acids from muscle cells, and your progress will be hampered.

Protein in every meal

The body can only process certain amount of protein in any given time, it is widely believed that the maximum is 50g, any excess is wasted, and is not stored by the body like carbohydrates or fat. Therefore you must aim to spread out your protein intake throughout the course of the day for availability and usage. It's good practice to spread out your daily protein requirement throughout the day, aim to consume 30-50g [depending on requirements] of protein in every meal.

Are all protein foods the same?

All proteins have the essential amino acids, but meat tends to have a much higher concentration and more proportionate ratios of essential amino acids. The best protein sources are obviously those that have a high concentration and are more "balanced" such as beef, chicken, tuna and eggs. If your dietary intake has missing or very reduced levels of certain essential amino acids it can reduce or stop protein synthesis.

Animal proteins tend to have higher concentrations of essential amino acids and are more bio available [more on that later] than vegetable based protein sources. vegetables have much lower concentrations of proteins and some lack essential amino acids, and must be combined with other vegetables to get a full range of essential amino acids.

Bio availability of protein foods

Proteins from foods need to be processed before they can be used by the body, this is rarely considered by trainers as they tend to simply go by nutrition information provided on the food label, which does detail digestion issues.

This is important when assessing protein intake and planning meals, if a food item is difficult to digest then the protein may be excreted out, and will not be synthesized by the body.

You can look up the Protein Digestibility Correct Amino Acid Score (PDCAAS), which takes into account the digestibility of amino acids in food. Here's a table below to illustrate, the highest digestibility is 1, meaning all amino acids are digested.

PDCAA score of a small selection of food items

Cottage cheese (Casein)	1	Soybeans	0.91
Egg white	1	Chickpeas	0.78
Soy protein	1	Fruits	0.76
Whey (milk protein)	1	Vegetables	0.73
Chicken	1	Cereals	0.59
Beef	0.92	Whole wheat	0.42

Note: beef has a lower PDCAA due to toughness of the meat, PDCAA can be increased by eating ground beef.

Taking PDCAA into consideration it's even more apparent that vegetable protein sources are less than ideal, with the exception of soy protein that is. But soy has its own issues in that it contains high amounts of isoflavones which are weak estrogens, which can affect hormone balance levels in men.

Recommended protein sources

Whey protein

Whey protein is one of the cheapest and biologically active protein sources, which means it can easily be used by the body. Whey protein should be used frequently to supplement protein in diet, but should NOT be used as a substitute for a well balanced diet. Whey concentrate has 80% protein and 20% carbohydrates, whey isolate goes through an additional filtration process and typically has 99% proteins

Cottage cheese

Cottage cheese has a high protein content from milk (casein), studies have shown that it improves nitrogen retention as well which prevents muscle loss.

Eggs

Egg whites have high protein content and bio availability and should be used extensively in your diet. Egg yolk also contains good proteins but has high fat content as well. Aim to take 1 egg yolk for every two egg whites.

Beef, chicken, fish

You can never have enough beef, chicken or fish in your diet, and while it may be tempting to opt for the cheaper protein sources mentioned above, there is merit in animal protein sources. Beef contains creatine which will improve muscle growth and performance, and fish has essential omega 3 and 6 and other essential minerals.

Fitness and nutrition isn't just about the macro [fat, carbohydrate and protein] but also the micro-nutrients which you get from a varied diet consisting of numerous protein sources

Notable mentions for other good protein sources are lean pork, milk and soy protein concentrate

Optimal protein intake

For building large amounts of muscle [or bulking up] you must consume around 1 gram of protein per pound of bodyweight, however with kettlebell training the focus isn't building muscle per se, but rather endurance and fitness and fat loss. Kettlebell trainers should aim to consume 0.8 grams of protein per pound of bodyweight. So if you weigh 150lbs your desired protein intake would be 120g per day.

Even that seems like a lot, but bear in mind your demand for essential amino acids increases tremendously with training, and it will increase your appetite and protein requirements as well.

So why is protein so important for kettlebell training?

Regardless of your goal, whether it be sport endurance or fat loss, protein is essential in your diet when undertaking kettlebell training. Without it your performance will suffer, you will not be able to beat your previous lifts, and may even decline in performance.

Protein isn't just for bodybuilders, even a sedentary person requires protein just for maintenance of general body functions and cell repair of skin, muscles, hair, eyes, nails etc. It may seem like the protein requirement is excessive compared to official guidelines and commonly dispersed knowledge on lifestyle magazines, but these guidelines are almost always aimed at sedentary people. When you lift weights your protein requirement increases dramatically.

In addition to this, a bare minimum level of protein is required for anabolic states for muscle tissue growth, without it no growth occurs, the body can change fat and carbohydrates interchangeably, but it cannot generate the essential amino acids found in protein so it must be supplied in your diet. As far as protein is concerned it's always better to have a little bit more than a little bit less.

Risk of excessive protein consumption

Protein consumption should be regulated by spreading out the intake across all meals throughout the day, protein digestion releases a by-product called uric acid which is toxic for the body. The kidneys have to work hard to process the uric acid and at excessive amounts can cause strain or damage to it.

The kidneys and liver work together to stabilise the build up of uric acid by converting it to urea and ammonia, which is flushed out of your system through urinating. There is a maximum capacity of uric acid the kidneys can deal with at any given time, and build up of uric acid makes the kidneys inefficient to deal with other toxins, so it's important to not overload the kidney and liver and to stay hydrated to allow the kidneys to be flushed out.

Water also has the added benefit of diluting the uric acid inside the body which makes it less harmful.

It should be obvious but if you suffer from or have a history of kidney or liver problems, you should avoid a high protein diet, as a high protein diet will be a challenge for these organs.

Good supplements to take to deal with the build up of uric acid is Pantothenic acid which is a B vitamin that is required for the conversion of uric acid into urea and ammonia.

Alkalisating the body through diet can help deal with acid build up, though this subject is beyond the scope of this book. Some alkali foods are celery, cucumber, pears, potato, olive oil etc. If you have trouble digesting large amounts of vegetables, you can juice them.

Final note on clean protein sources.

Supermarket shelves are full of cheap processed meats that are not clean cuts of meat from an animal, but are bits and pieces of leftover skin and meat plied together with fat and starch. You should avoid eating them as much of it is skin and fat which does not provide you with a reliable serving of essential amino acids, and makes calorie control difficult.

You should aim to consume meat from completely clean cuts of meat, fatty cuts are fine in moderation. But stay away from processed fast food and reconstituted meat.

DIET & NUTRITION

CARBOHYDRATES

Carbohydrates are the bodies preferred source of energy, as it is the first food type which is burned for energy in the body. Barring the exception of milk all carbohydrates come from plants.

Nutritionists differentiate carbohydrates into two subcategories, simple carbs and complex carbs. Simple carbs are easily digestible sugars such as monosaccharide and disaccharide, complex carbs are starches and fibre, both of these are known as polysaccharides.

The division is created to differentiate the speed of which they are processed by the body, simple carbs are quickly absorbed by the body, complex carbs take a lot longer for the body to digest as they need to be broken down further.

What happens to carbohydrates in our body

Both simple carbs and complex carbs are broken down into simple sugar in the form of glucose to be used by the body, when glucose is taken or produced by the body it enters the bloodstream and causes the pancreas to produce insulin which is required to feed glucose into the muscles and force excess into the liver. The job of insulin is to regulate the amount of glucose in the bloodstream, if there is too much glucose in the blood it can result in blindness, if there is a lack of glucose in the blood it can lead to hypoglycaemia which begins by causing the person to feel faint and pass out.

Simple carbs are processed far quicker by the body and converted into glucose far quicker, this can cause blood sugar spikes and the pancreas needs to quickly produce high amounts of insulin quickly to push the glucose into the muscles and any remaining into the liver, if there's any glucose still left after filling the liver then the surplus is converted to fat in the liver to make room by a process called de novo lipogenesis (DNL), fat can be stored long term by the body in the adipose tissue which is predominantly in the butt, thighs, waist and back. The distribution of adipose tissue differs between men and women greatly and slightly differently between different people of the same sex.

The blood sugar spike can be limited greatly by eradicating all simple sugars from your diet. Because complex carbs take longer for the body to digest, the glucose is released slower over a longer period of time which allows the body to cope a lot better. The end effect is that glucose dripped into the bloodstream in a more manageable way, so there is less surplus which means less glucose is converted to fat and stored in your adipose tissue.

Insulin response in relation to exercise.

We've established that insulin is required to deliver glucose into the muscles, this is particularly important after working out. Usually during a workout the muscles will start to deplete their energy reserves, and after workout need to be replenished, this is the perfect time to take high sugar carbohydrate drinks as it creates an insulin response to allow the muscles to be fed. In addition to this insulin is required for protein synthesis. So it's an important factor when working out.

The oversimplification of "simple carbs" and "complex carbs"

Now for the sake of simplicity it is commonly taught that simple carbs converts to glucose a lot quicker, and a lot slower for complex carbs. While this is generally true, there are many that do not fit the norm. So it's important to study different carbohydrates on a case by case basis. Potatoes for instance can cause a rapid insulin response, far quicker than sucrose.

You can look at the speed in which carbohydrates convert to sugar in the Glycemic Index (GI) table below. The greater the number, the quicker it can convert to glucose by the body and cause the insulin spike

Some of the common carbohydrates with the associated GI score are listed below, the GI rating of a carbohydrate is simply the rate at which it converts into glucose by the body, glucose is the raw energy source and is rated 100. The test is done by feeding test subjects with a given carb and testing to see how much glucose is present in the blood stream subsequently afterwards.

Broccoli	10	Muesli	43	Corn, fresh	60
Lettuce	10	Sweet potato	44	Figs, dried	61
Mushrooms	10	Capellini	45	Raisan Bran	61
Onions	10	Grapes	46	Apricots, canned	64
Red Peppers	10	Linguine	46	Jams	65
Fructose	19	Bran Buds	47	Pineapple, fresh	66
Cherries	22	Green peas	48	Pancakes	67
Grapefruit	25	Marmalade	48	Puffed wheat	67
Prunes	29	Carrots	49	Sucrose	68
Apricots, dried	30	Mango	51	Grapenuts	71
Apple	38	Banana	52	Watermelon	72
Pear, fresh	38	Fruit Cocktail	55	Bran flakes	74
All Bran with Fiber	38	Oat Bran	55	Shredded wheat	75
Spaghetti, white	38	Honey	55	Pumpkin	75
Plum	39	Raisins	56	Waffles	76
Strawberries	40	Apricots, fresh	57	Baked potato	85
Orange, Navel	42	Kiwi	58	Corn flakes	92
Peach, fresh	42	Bran Chex	58	Glucose	100
Pear, canned	43	Rice vermicelli	58	Dates	103

As you can see complex carbs tend to have a lower GI rating than simple carbs, barring the exception of a few anomalies, fructose has a deceptively low GI rating due to the way it is processed, unlike all other carbs which are processed during digestion, fructose is sent straight to the liver to be converted into glucose, which tends to take longer than digestion. The liver turns much of fructose into fat rather than sending it into the bloodstream as glucose first, therefore fructose should be avoided at all costs.

Why is fructose treated differently than other carbs?

Glycogen is the secondary energy source in the body and can be produced by the liver and the muscles. In addition to this liver actually uses glycogen as an energy source by itself. Glycogen can be produced by converting it from glucose, however it is four times easier for the liver to create glycogen from fructose than glucose. This is why fructose is sent directly to the liver, if the liver's glycogen stores are low it will replenish its stores from fructose, if not then it will be converted to fat, hardly any will be fed to the muscles.

Because of this, fructose is probably the worst carbohydrate you can consume, because the overwhelming majority of fructose get turned straight into fat. It is commonly found in soft drinks and fruit juices that use high fructose corn syrup as the main sweetener. It is also found in table sugar (sucrose) which is part glucose part fructose.

Carbs sound awful, why do we bother with them?

Carbohydrates are fine in moderation as long as you avoid fructose in your diet and try to stay away from the high GI carbs as much as possible [glucose based simple carbs are fine post workout].

If you're on a fat loss diet you should only consume carbohydrates lower than GI score of 55. Also limit your carbohydrates to the start of your day.

Fibre in carbohydrates

Fibre isn't an energy source unlike protein, carbohydrate or fat, and therefore is overlooked by many people, but make no mistake it is absolutely crucial for your well being. Fibre is usually derived from the outer layer of fruits and vegetables, although most fibres aren't digestible by the human body, our bodies still need any fibre it can get. Fibre has numerous role in your health

- It helps with transit times of your bowel movements, it provides the lubrication needed to excrete waste and prevent constipation.
- Helps keep your intestines clean and helps prevent potential problems such as haemorrhoids and colon cancer
- When consumed with high GI foods, fibre helps reduce the release of glucose into the bloodstream.

Fibre is essential for the routine digestive functions of the body, a good source of fibre are all-bran cereals, wholemeal pasta, baked beans, avocado, sweet potato.

DIET & NUTRITION

FAT

Fat is the most misunderstood food type, just like protein it is an essential macronutrient. Fat is used as a long term energy source, and it is the only form in which calories can be stored in the body for later use. Fat is the most calorie dense nutrient of all, one gram of fat contains 9 calories, which is different to protein and carbohydrate which contain 4 calories per gram. Fat is a key structural component for all cell membranes and is key for the absorption of vitamins A, D, E and K.

Saturated fats

Saturated fats are considered unhealthy and bad because they can raise blood cholesterol levels, which can lead to heart disease. Saturated fats are found in animal fat, lard, palm oil and other cheap sources, the tendency of saturated fat is to go straight into storage, and offers no other benefit other than energy storage.

Unsaturated fats

These are preferred fat sources and are comprised of two type

- **Monounsaturated fats**
known to lower bad cholesterol (LDL) and increase good cholesterol (HDL), they are present in red meat, milk, olive oil and high fat fruits such as avocados.
- **Polyunsaturated fats**
Much like monounsaturated fats, polyunsaturated fats help reduce bad cholesterol, and in addition to this have other positive benefits, polyunsaturated help reduce cortisol [stress hormone], hinder fat storage and increase metabolism [promotes calorie burn], they are found in essential fatty acids like flaxseed oil, fish oil, cod liver oil sunflower oil and some nuts.

Trans fats

Trans fats need to be avoided at all costs, they are manmade fats created using a chemical process called hydrogenation. The process is used to turn oils into fat to be used in fast food to prevent the liquid oil from turning rancid. Trans fats are solid in room temperature are usually found in baked goods and can sometimes be used in fast food restaurants for frying.

Trans fat can also be created by frying unsaturated fats, which changes it's molecular shape, this makes trans fats unable to fit properly into cell membranes, because of the unnatural shape it can cause cell membranes to deform. This can increase the risk of cancer.

Essential Fatty Acids

The essential fatty acids are required for thousands of day to day bodily functions, they're called essential fatty acids because your body is not able to produce them internally and need to be consumed in your diet. They are required for cell maintenance and production as well as hormone production. In addition to this they are not stored in your body like saturated fat.

There are two types of essential fatty acids (EFAs), Alpha linolenic acid (ALA) and Linoleic acid (LA), they can be found in these following food items.

- ALA is found in fish oil, cod liver oil and many cold water fish and is converted to omega-3 in the body
- LA is found in Sesame oil, corn oil, safflower oil and soybean oil and is converted to omega-6 in the body.
- Flaxseed oil and UDO's choice oil blend offer a combination of both of these EFAs

EFAs are not stored in the body like saturated fats, so you can consume as much of it as you like, it's not established exactly what a person's nutritional intake of EFAs should be, suffice to say studies suggest the more the better. For balance you can opt for flaxseed oil and Udo's choice oil, however Linoleic acid is more readily available in your diet than Alpha-Linolenic acid therefore you should put a little bit more emphasis on omega-3 sources.

The bias of Linoleic over Alpha-Linolenic, is down to two things, Alpha Linolenic goes rancid far more easily and is also more expensive, Linoleic is easy to produce as it comes from vegetable sources, Alpha-Linolenic tends to come from fish which is more expensive.

Why omega-3 is so crucial

Omega 3 is usually derived from cold water fish like mackerel, salmon, tuna and sardines. It can also be found in cod liver oil. It is a fatty acid containing two oils known as EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid).

The benefits of DHA and EPA are endless, just a few of the benefits are increases in metabolism, lower heart disease risk, increased testosterone, prevention of muscle breakdown, reduced cortisol [stress hormone] increased good cholesterol [HDL]. They are also required for hormone production and keep the blood thin and reduce heart attack risk.

What's the best way to get omega-3 (EPA and DHA) from your diet?

You should aim to get 2:1 DHA to EPA in your diet, ideally your diet should contain a total of at least 500mg of DHA and EPA as a bare minimum. It's important to note that most products, including supplements will tend to have higher EPA as it tends to be cheaper.

This is especially the case with flaxseed oil, you should aim to get your omega 3 from fish oil capsules.

[table of fats due soon]

Note on EFAs

- EFAs are unsuitable for frying or heating at high temperatures, they turn into harmful fats called trans fats where they lose all their benefits
- Cod liver oil is not suitable for pregnant women, you should seek advice from your midwife or doctor before changing your diet.
- EFA oils are difficult to store, and go off easily, you should keep them in a dark place and ideally refrigerated. You should not store them for long periods of time and consume them immediately.

DIET & NUTRITION

WATER

Roughly 70% of the human body is made out of water and for the body to keep on functioning properly it needs an adequate supply of water coming in throughout the day. This is particularly the case when you're on a weight loss diet or a fitness programme because the body's need for water increases in order to flush out poisonous toxins, to and carry essential maintenance work in the body.

You should drink water throughout the day, a lot of people go without liquids until they are thirsty, by the time thirst has set in usually your body is past dehydration and has already begun to slow down metabolism and maintenance work.

It has not been firmly established exactly how much water the human body requires, but a rough rule is to aim for 8 glasses of water, and if you are training intensely you should aim for 1.5x more than during your workout days.

Protein synthesis creates a lot of waste by products inside the body which needs to be diluted in water in order for the body to process it, in addition to this the kidneys need water in order to process all the toxins. Without sufficient water the kidneys will not be able to function effectively and may also help create kidney stones.

Why plenty of water is essential for fat loss

If your goal is to lose fat, then there's even more reason for you to drink plenty of water, water can help you lose fat in the following ways

- **Reduces hunger pangs**
Water gives you a more "full" feeling, and can stave off hunger pangs and a glass of water before bed can help eliminate midnight snacking, provided your bladder can hold onto the water that is.
- **Increases metabolism**
The metabolism is the speed at which your body burns calories, and consequently fat levels in your body, insufficient water in your body will cause your body to go into survival mode and slow down your metabolism
- **Liver function**
The liver is responsible for turning your stored body fat into usable energy, an increase of water in your diet will help the liver work more efficiently and thus lose fat.