

London Kettlebells Guide to gripping.

(Or how to crush your grippers, roll up frying pans, wreck steel and other feats of hand strength)



Just be warned – we take no responsibility for grip training addiction, being arrested for going to the local DIY store and snapping wrenches, looking at everything as a potential grip challenge...things like that!

Feel free to forward this e-guide to anyone and check out <http://www.londonkettlebells.com> for even more grip training articles and equipment.

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Types of grip strength

This chapter is aimed at explaining several different types of grip strength and ways of improving them.

Whatever your chosen sport or hobby, an increase in grip and general hand/wrist strength can be enough to give you the edge over others or to continually set new personal bests. Whether you are swinging a golf club, climbing a rock face, entering a grappling competition, training with Kettlebells or just trying to close a certain strength handgripper, just a few weeks of working your grip specifically and with a balanced and progressive routine can yield good, to great, results for nearly every one of us. The training sessions don't need to be long, just effective, quite challenging and above all - consistent! 10 minutes 2-3 times a week is more than enough to develop serious grip strength with several months of training.



Crushing Grip:

Crushing grip refers to a squeezing action where the hand makes, or tries to make, a fist. Probably the best way to train this type of grip strength is with hand grippers - not any old hand grippers! But real, strong, metal grippers that are tough and take time and effort to close. There are many types of grippers to choose from the world famous Captains of Crush grippers to Robert Baraban grippers, Heavy Grips, Beef Builder grippers etc. The good thing with different types of grippers is that

some sets fall nicely into the places between the grippers of another set. This has the advantage of acting as a stepping stone to the next gripper in the collection you are trying to close.

Training Crush Grip:

There are several ways of using hand grips to improve your crushing grip. Included here is information on terms you may come across to help you progress with your crush grip training:

- Cheat/forced close - squeezing the gripper as far as you can with one hand then using the other hand or a push against the hip to finish the close
- Close - when the handles of the gripper touch or the last part of the squeeze action after the sweep
- Dogleg - the part of the spring leg which is straight compared to the other
- Filed gripper - filing down the inside of one of the legs of a gripper. The purpose of this is to increase the range of motion and therefore the difficulty on a gripper you know you can already close
- Grind - when closed, rotating the hand to cause the handles to scrape or grind against each other
- Hold - when the handles touch, keeping them together for any length of time
- Inverted rep/close - closing a gripper with the spring facing downwards
- Negative-using a cheat close then trying to stop the gripper from opening or allowing it to open as slowly as possible
- No-set close - using only one hand to set and close a gripper without assistance
- Overcrush - when the handles touch, continuing the squeeze as hard as you can
- Setting - using the other hand to position the gripper and often to assist in the initial part of the close. The hand must then be removed for any certification attempt and be more than 12 inches from the closing hand on the last 1 inch of the close attempt

- Strap hold - placing a weighted strap between the ends of the handles and using an overcrush to keep the strap between the handles for as long as possible or for a set time until the weight falls
- Sweep - the first part of the range of motion of a gripper. This is the larger action which takes the handles from the start position up to a nearly closed position
- Timed hold - holding a gripper shut for a timed duration



Pinch Grip:

Pinch grip is a squeezing action similar to that of a crab's claw - the fingers and thumb move together to clamp on either side of an object before lifting. The most common types of pinch grip training are plate pinching and block weight lifting.

Training Pinch Grip:

- Plate Pinching - a good test of pinch strength is to see how you rate against some Olympic plates. Place the plates upright and together (smooth sides out) and pinch on to them from the top, then squeeze and try to lift them. Try 2 x 20lb plates then work up. The pinch can be trained close grip (2 plates) or wide (several small, lighter plates, usually 10lb). Passing plates you can lift from hand to hand is a very good workout and requires good pinch grip endurance. The aim of many people who train their pinch with plates is to lift the infamous 2 x 45lb plates!
- Block weights - the most common types of block weight are usually the ends of cast dumbbells believe it or not! The bar is removed leaving 2 block weights and a small bar that looks nice. Block weights are a superb way to train the hands as they can be lifted from the face (wide side) or top (thinner side) and also thrown about. You can spin and catch them, throw them hand to hand, drop and pick them out of the air and so on. With heavier block weights the only way to really lift them from the floor is with the pinch action, or a claw action, if you lift from the face of the block. The heavier the block the wider it is so the pinch gets worked at different angles. Block weights are also referred to as "blobs" and "the blob" is ½ of a 100lb cast dumbbell, or a 50lb block weight. Lifting this weight from the floor is the aim of most people who train with heavy block weights. For an adjustable block weight a pinch block can be attached to a loading pin and loaded with weights for a similar style of training.



Thick Bar Grip:

Thick bar refers to training 1 arm (dumbbell) or 2 arm (barbell) lifts where the thickness of the handle is much wider than normal, usually 1 inch. The bar diameters can be anything from 1.5 - 4 inches and sometimes even more.

Thick Bar Training:

Thick bar training can easily be implemented on standard training equipment by using a sleeve to place over the handle of a normal dumbbell bar. Another adjustable thick bar tool is the Rolling Thunder by Ironmind, which is a revolving 2.5 inch handle that attaches to a loading pin. One of the most famous thick bar training tools is the Thomas Inch dumbbell. It weighs 172 pound (nearly 12 stone) and has a handle thickness of 2 3/8 of an inch or about 60mm. The thickness of the handle is what stops it ever leaving the floor for most people. Many people that train thick bar regularly have the Inch dumbbell as their desired lift. Recently, a new monster has emerged, the Millennium Dumbbell (228lb). This beast has the same stats as the Thomas Inch dumbbell, but weighs 25kg more and so far has only fully left the floor for 3 people!



Leverage:

Leverage refers to the use of training tools where the weight is displaced to one end, like a sledgehammer, rather than balanced like a standard barbell or dumbbell. Leverage mainly works the wrists but is also a great way of training the grip as an incredible level of crushing power is needed to counteract the torsion produced by the displaced weight.

Leverage Training:

Probably the most common form of leverage training is the sledgehammer or steel/wooden club. These training items can be used in such a way that a very high level of tension is placed on the grip and wrists just to maintain control of them. They can be held as far from the weighted end as possible and either rotated side to side in front of the body or held out at arms length to the front and side of the body and lowered towards the nose - a true test of wrist strength and grip confidence!



Active recovery:

Active recovery is an often overlooked part of grip training and can be a real bonus to your gains. The idea is to train lightly so you still maintain what you have developed but not to the extent where fatigue sets in or injury risk is a possibility. Some really great training tools have been developed specifically for active recovery and intense grip training alike depending how you use them: the Snowball and the gyro Roller Ball.

The Snowball can be used to work the various muscles of the hands in a soothing way after grip workouts or as part of an active recovery programme on your days off. It can also be used with force for working various aspects of grip (the crush, pinch, finger training, thumb training etc.) as well as for warming up the hands or cooling down after a grip training session

Grip Training - where do I start?

The best idea would be to ask yourself what you actually want before you decide what to do unless your aim is just general grip strength. If you want to shut a certain gripper, base most of your grip training around the grippers, if you want to pinch heavy plates, base a lot of training on plate pinching and block weight lifting and so forth. Start off with some basic equipment:

2-3 grippers

Block weight

Sledgehammer or club - a dumbbell loaded one end only can also do the same job!

Some active recovery equipment

Chalk

This is just a basic example for someone who is serious about improving their grip - if you want less, get less; if you want more, get more. These items will allow you to train your grip from several angles and allow for good, general grip progress if used properly and consistently. If you already follow a training programme then finish the routine with 5-10 minutes of grip work. If your training is mainly with free weights, place the grip session at the end of your normal routine as fatigued or even moderately trained grip will have a negative effect on your lifting. If you are worried about your grip training always being less than your best as it is only trained after a good workout, test your personal bests on the grip items you use before your workout, then after your weight training hit the full grip routine. An alternative would be to train your grip on alternate days to your other forms of training or at different times in the day such as weights in the morning and grip in the evening when reasonably fresh again.

Beginners Guide to grippers

This chapter is aimed at people new to the grip world and will help them progress faster by avoiding the common pitfalls and mistakes that are common to grip training.

The most important thing to remember when training with "real" hand grippers is that they are not toys. You do not bang out reps in front of the TV during the adverts and no-one really cares if you can close a plastic gripper 200 times, it means nothing at all. In fact, people that claim hundreds of reps on these useless grips find that they cannot even close a trainer grip and a scared stiff when they squeeze a no.1 and it stops ½ way - the entry level for most guys.

Because the grips require a lot of dedication and hard work, warming up is essential for the beginner and gripmaster alike. I once heard of a guy who picked up his no3, slammed it and the tendon in the palm of his hand exploded - we all know cold muscles and tendons do not exactly respond well to a PB attempt on the bench or squat; treat your gripper with the same respect!

The exercise for closing grips (crush strength) is probably one of the easiest exercises you will ever do, the hand simply makes a fist. 2 groups of muscles come into play here, the hands and the forearms. To ensure the hands are sufficiently prepared for grip training, pull the fingers together so the muscles in the palm contract – Fig.1. Then work the opposite action by expanding, or fanning, the fingers so the palm slightly stretches and the tendons on the back of the hand contracts – Fig.2. Repeat these stretches 2-3 times and hold each one for about 10 seconds and moderate effort.

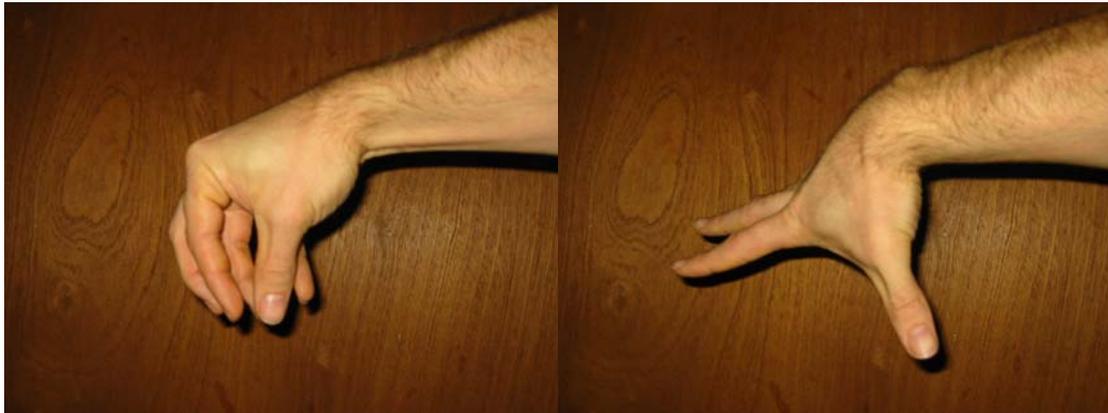


Fig.1

Fig.2

Now we move on to the forearm. First pull the fingers back to stretch the tendons on the inner forearm – Fig.3. Then reverse the action to work the wrist, stretch the outer forearm tendons and slightly contract those of the inner forearm – Fig.4. Again, repeat each stretch a few times and hold for 10 seconds with moderate force.

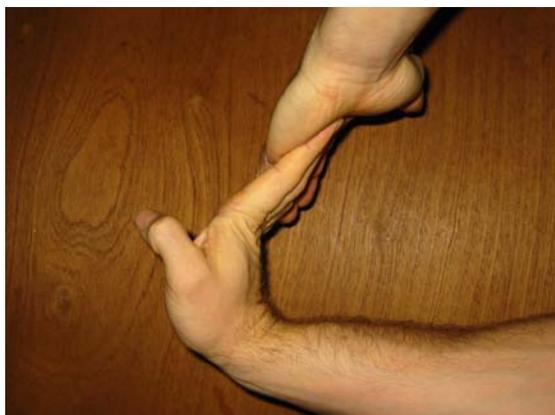


Fig.3



Fig.4

To finish the warm up phase we can now combine the efforts of the hand and wrist and work the crush action required for training with the grippers. Squeeze a fist with moderate force and hold for a few reps of 10 seconds, this exercise is specific to the training we are preparing for – Fig.5. An additional warm up for the fingers and palm muscles is to work a pinch action with the gripper by holding it horizontal. From here simply squeeze the handles with moderate force, keeping the fingers extended – Fig.6.



Fig.5



Fig.6

The final stage of the warm up is using the gripper itself. We have prepared the body for grip training and now we want to include working specifically with the training tool. The best way to do this is with combinations of slow and fast partial closes to fully work the tendons, ligaments and muscles. Use sets of 5-10 reps and alternate between fast and slow partial closes. Figures 7 and 8 show the start and finish positions of the partial, or half, close.

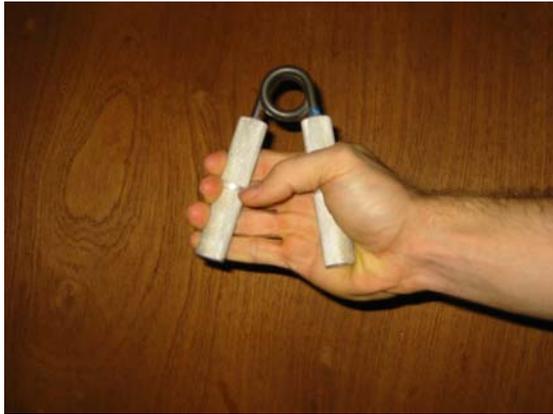


Fig.7



Fig.8

On a final note: people who are desperately close to closing a gripper may find it beneficial to fully warm up and “activate” the areas that are letting them down, the weaker fingers. Physics taught us that leverage is greatest, furthest from the object you are trying to move, in this instance the gripper spring. Therefore, the strength of your weaker digits is the deciding factor if your crush can only get you 95% of the way. You can isolate these by inverting the gripper and working the fingers singularly, in twos, or threes – Fig.9. Without getting too technical, one tip is to use a very weak gripper for this. If you use a gripper you can only just budge with your ring finger and pinkie, you are not training it in the necessary position for it to help with the close action, namely, close to the hand with the handles nearly closed. Once you have fully warmed up you are ready to crush away – Fig.10. If you are after a grip smashing routine, please check “The Clamp”, a future e-guide. For information on setting a gripper and other tips check the grip training overview chapter.

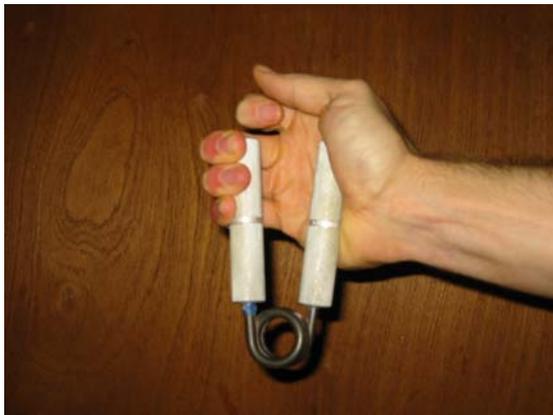


Fig.9



Fig.10

Pinch grip training

There are many ways to train pinch grip and these usually vary according to the equipment you use. A typical pinch test would involve 2 flat surfaces otherwise it becomes part pinch and part finger claw if you are able to tuck the fingers under the "rim" of the weight.

If you do not have access to a pinch block and loading pin that can take stacked weights, the best alternative is to face 2 Olympic plates inside out (smooth sides facing out). Press the palm of the hand tight against the top of the plates, which will be standing up vertical, then clamp the fingers and thumb onto the smooth sides of the plates and lift. If you have a good ranged weights set you can work up through the weights using numbers or weights. For numbers you add plates - 2 x 10lb, 3 x 10lb, 4 x 10lb etc; for weight you work the disc ladder, 2 x 10lb, 2 x 15lb, 2 x 20lb etc. While the weight progression sees the hand span remaining pretty constant as you only ever use 2 plates, the number, or plate, progression, sees the pinch grip required to lift the weights becoming wider and wider. This will greatly improve hand strength as the muscles are forced to work at different angles rather than 1 set position for each lift.

Falling the plates there is the DIY method - cut a 2" piece of wood and screw a hook through one side, then with a piece of rope loop up your standard weights. Chalk is optional but is essential if you are near maximum effort and are hungry for just a bit more.

Lifting tips:

With pinch lifting the muscles mainly used are the palm and fingers. The thumb is important but not as much as it would be for "thick bar" lifting. When making contact with a 2 plate lift it is important to get the palm tight over the top of the plates (to maximise contact with the plates) and experiment with "fanning" the fingers and having them close together, personal preference. For wider lifts, 3/4/5 plates, the key is to secure one side of the lift as tight as you can at the thumb joint. This is done by fully opening the hand as far as possible (thumb close to or just beyond 90 deg to the fingers) and pushing the soft part of the skin where the inside of the first thumb knuckle is (next to thumb pad) as tight as you can onto the edge of the weight. From here you maintain the hand flex and extend the fingers over the weight. Attach the fingers by flexing them, but do not grip from the palm like you would for a crush, let the fingertips wrap over the weight. This ensures maximum contact for your hand size with any weight.

Chalk - the areas needing chalk will be the entire inside of all 4 fingers, thumb pad and inside of the thumb.

Happy lifting!

Steel Bending

Introduction and history:

Many people who train can power lift big numbers, use very heavy Kettlebells and do bodyweight exercises for hours at a time. However, a small 6 inch bar of steel may stop them dead in their tracks. Steel bending has for a long time been regarded as the ultimate test of strength combining upper body strength with grip, wrist and endurance. It was a favourite among old-time strongmen and many shows would have demonstrations of iron bars, chains, and horseshoes, all being bent or snapped by the showmen of yesteryear. These demonstrations were amazing, more so when people came on to the stage to try or test these tools of the trade. People are quite humbled when they puff and pant over a tiny bar of steel only to see someone else horseshoe it in 2 seconds like it was a straw.

Getting started:

There are three main components of strength in a standard bar bend, two active at the start and the third mainly in the last stages

Crush or general grip strength
Wrist power
Upper body strength

Grip strength refers to the ability of the hands to squeeze as hard as possible to ensure every effort is directed towards the bar.

Wrist power is the ability of the wrist to act as a vice in order for the bar to begin to bend under pressure

Upper body strength is the ability of the chest, arms and back to crush the ends together when the bar reaches about 90 degrees and to finally finish in a horseshoe shape.

Bending styles:

Slim Farman style



The Slim Farman style is a basic grip where the palms face down and wrists rotate until the palms face each other.

Vertical Grip style



The vertical grip uses part of the supporting hand for leverage, the top hand either rotates to the side or slightly forwards for the bend.

Low thumb pad style



The low thumb pad is a very common style among strongmen and steel benders. The bar is pressed or pushed over the supporting thumb pad. The supporting hand can also rotate forwards to aid the bend.

High thumb pad style



The high thumb pad grip is a very strong style and the supporting arm remains tight against the body, under the chin. The hand is rotated so the small finger is closest to the body. The grip is the same as the vertical style but with much more support and you bend with a combination of lowering the bending arm and outwardly rotating the wrist. The bending area is also the thumb pad region.

Spike bend style



The spike bend style is another based on very strong wrists and from holding the bar with the palms facing the body, the elbows raise while the wrists are locked until the knuckles face each other. From here the fingers link to go into the crush.

Steel bending is not just brute force, but an art, like most forms of training. Probably the best improvement in performance will come from intense grip training with hand grippers and block weights, as well as wrist training with sledge hammer routines and wrist curls. Progress can be quick but injury can be quicker. Begin with very light bars, even if they are too easy. Get the body (mainly the arm tendons and wrist joints) used to this new form of training. Progress will be quicker if training for the first few weeks is based on grips and wrist work with only a few bars bent per week. Once the body adjusts, try some tougher stock and eventually work up to bending a few bars a day to keep the technique fresh and powerful. The additional training is still very important, but at a more intermediate level of confidence and progress, training can continue on graded bars with the aim of gradually climbing in bending progress

Have fun and bend safely!

The LKB Biography Bit:

Quite possibly some of the first adopters of Kettlebell training in the UK we started swinging them early 2002. Since then we've made it our mission to bring Kettlebells to the forefront of health and fitness, strength and conditioning training over here in the UK. We've been trained by Stan Pike and the UKKA. We also work within the London area to help spread Crossfit. In 2006 we developed, with Andrew Stemler (Crossfit London) and John Murphy FHFST, a Kettlebell training Masterclass.

Aimed at members of the general public looking for a safe, professional and effective Kettlebell training course and for members of the fitness industry interested in adding Kettlebell Training to their arsenal of techniques, the course is unique in that it is fully endorsed by REPS (Register of Exercise Professionals, the governing body for all UK fitness instructors, personal trainers and other professionals in the industry) and is worth 3 CPD points. Along with our partners, we are the *only* UK organisation with this level of recognition. No other course comes close to matching the effectiveness, professionalism and quality of the Kettlebells Masterclass.

Overall, we've had more than thirty years experience in martial arts and physical training and have developed several specialist training methodologies.

Our main skills are in Kettlebell training, grip work, flexibility and mobility, martial arts and strength and conditioning.

If you wish to contact us regarding Kettlebell Masterclasses, personal or group training, please email us, training@londonkettlebells.com and we will get back in touch with you.