

## Deep Muscles of The Back II

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### Abstract

When one conjures up notations of power, a powerful back immediately falls headlong into our widening mindset. This is clearly for a specified reason: strength and spinal erectors are inseparable allies.

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Previously( part one of deep muscles of the back ), we discussed what this deep muscle group accomplishes. Its task, is to clearly extend the spine. Putting two and two together, we must clearly aim for resistance against extension. And when we speak of hardcore density, nothing packs on the mass like static work. Simply put, the line of gravity, passes in such a way, so as to automatically flex the spinal column. Your intrinsic muscle fibers, are continually twitching so as to maintain an upright posture.

How much more so, is this the case during a hardcore squatting routine? Indeed, as far as resistance is concerned, it don't get much better than this! Therefore the first principle, in back training, is to focus on heavy, compound power movements for a set time. By changing your routines, to focus on heavy reliance on the erector muscles, you will see a drastic change, within a very short time! Lets analyze how to incorporate this into routines for each body part:

1. Shoulders – The first aspect of shoulder training, is to utilize free weight exercises, that rely on erector support. The best of such are standing presses. Military, are excellent, as are dumbbell, as they cause even more stabilization muscles in the back complex to get involved. The key's here, are to keep a nice tight arch in the lower back, squeeze your shoulder blades together for stability, and focus on controlled movements.

I find that holding the weight for a tight peak contraction, calls the sacrospinalis into play quite nicely. For extra work in this area, utilize push presses. These are heavy cheating military presses. The key is to choose a weight that you can only military press for a low amount of reps strictly. Say 6 reps. And to cheat out 10 total. Begin by bending slightly at the knee, while maintaining a tight arch, and then accelerating the weight upwards.

Of quite obvious benefit also are clean and presses.

2. Leg Workouts – The number one exercise in this category is without a doubt squats. Heavy squats in the 4-8 repetition range will build a powerful back. Another tip, is to utilize heavy half squats, as these add mad density as well. And finally, I would recommend static squats. You simply squat down half way, and hold the weight for approximately 30 seconds. The key here is again a maximum strong arch, and contracted shoulder blades! This can be a detriment if form is not maximal. Again, on squats, you must not lose your strong arch, no matter what!

Rather than performing dumbbell lunges, I would recommend walking lunges. These will pack on the mass quick! The key here, is to not lose the battle of forward momentum! Do not round your back, a tight arch must be maintained!

3. Back Workouts – Aside from direct lower back work, you will want to utilize several free weight rowing movements. One way to emphasize the lower back, is to bend over at a near 90 degree angle. But do not bend so far, as to round your back. You must have complete control in this area! Barbell rows, t-bar rows, standing instead of kneeling one arm dumbbell rows etc. Essentially eliminate the bench, and use your erectors for stability.

4. Arm Routines – Again, rather than use a machine, or lean back in a comfortable bench, perform everything standing. This means, standing barbell curls, standing triceps extensions etc. I would also recommend utilizing heavy movements, in the 6 repetition range. Alternating dumbbell curls definitely hit the nail on the head!

## **Overview**

1. Your goal is to utilize exercises which challenge, but not strain the sacrospinalis. That is to say, you will want to not release the strong arch, or the contraction in the shoulder blades, when unnecessary.

2. With heavier exercises, you will need to implement a tremendous stretching routine. Stretch each of the muscle groups discussed in part one of this series before hardcore lifting, so as to not compromise vertebral curvatures, or pelvic lining.
3. Heavy free weight exercises are the key. When possible, perform them standing.
4. When done, stretch the back, with a movement such as the cat and camel thoroughly. This is vital, to prevent tightening of the muscle group.

Muscle Fiber Ratios: Direct work is next on our agenda. It would behoove us, however to first list the exact muscle fiber ratio found in this region of the body. The erectors are 58.4% type I (slow twitch), and 41.6% II ( fast twitch ) fibers. Deep: 54.9% type I , 45.1% II fibers(1).

Once again, when we look at the human body, we must realize the designs within it. The erectors are asked to continually twitch and contract. The fact that they are a higher percentage of slow twitch muscle fibers, makes perfect engineering sense!

### **Direct Sacrospinalis Work**

The former strategies were based on stabilization principles, where as the following will take a tremendously deep look, at direct extension, under resistance work.

1. We begin our discussion with the hyperextension. The sacrospinalis, can not only extend the vertebral column, but it can hyperextend it. Hyper always refers to above, more than, or beyond. Extension in its absolute sense means to straighten out any body part, the following exercise allows one to go beyond this.

Before I explain the keys to utilizing this movement, I must confess that most athletes who use it, for lower back purposes, do so incorrectly. You see, there is a specific comfort zone, when using a hyperextension machine.

This zone however, places more emphasis on the glutes and hamstrings, then the lower back. Lets analyze this concept further. Most trainees position themselves on the machine in such a way as to have their quadriceps making contact with the pad, with the back isometrically held in a nearly extended position. If your intentions are to carve out pillar mass in the lower back region, then you will want to line up the top of the pelvic region / waist ( the top region is anatomically known as the iliac crest ) with the edge of the pad. This places the knee flexors in a stabilized position, thus calling for greater recruitment of the sacrospinalis.

For maximum separation, you will want to squeeze( but not hyperextend ) on every repetition. Many athletes begin with a plate, and drop it after failure, while continuing the set strip style! This is a favorite of Charles Glass.

2. We will now concentrate on the king of back exercises. The deadlift. The first discussion we will have is on the basic form of this exercise.

### **Deadlifting Grips**

A. The most basic grip on the deadlift is an overhand grip, with your palms facing you. What is the advantage here? You have an even distribution of weight on both biceps. It's a safe mechanism, and is great for building the forearms.

B. The problem arises however, when trying to use a weight that is heavy enough to tax the back muscles. You see, when this occurs, there are really two choices. One is to use straps. I prefer not to do this, unless it is necessary. The other option is an alternating grip. The advantage here is that it provides a straddle effect, which allows the athlete to handle more weight. The disadvantage is that it distributes the weight unequally on the biceps brachii. The solution? Simple, every set, use a different alternating grip. Switch hand positioning.

Foot Spacing – There are three basic stances for this exercise.

1. The first basic stance requires the feet to be spaced approximately hip width apart. This requires the athlete to take a slightly narrower than shoulder width apart stance. However, some athletes prefer doing deads with their feet farther apart. I would suggest beginning with this stance, and testing what feels most comfortable from there. Toes face forward

2. The second stance, is a simple shoulder width apart spacing. Again, toes forward.
3. Above probably give the greatest pulling ability. However, many trainers have their athletes implement what is called a sumo stance. This article is mainly focused on back density. The sumo enhances stress on the glutes. It is a viable option however. And still thickens the back rather nicely. In fact, one superset worth trying, is the sumo deadlift, followed by standard deads. I normally would start with the former, and end with the latter. The key here is to take a much wider than shoulder width spacing. Approximately 130 to 150 percent of your normal shoulder width measurement. Additionally you will want to slightly point your toes outward( no more than 45 degrees ).

What about hand spacing?

1. Hands should be spaced just outside of your legs, when performing shoulder width or hip width deads.
2. Hands are shoulder width on the sumo deadlift and inside the legs.

Upper Body Positioning

1. Again, you will want a tight arch at all times!
2. I prefer to keep my scapula retracted. In order to do this stick your chest out, and pull your shoulders back. Many bodybuilders will not over exaggerate the retraction until they reach the top of the movement, so as to build middle back thickness.

Overview of Basic Dead lifting Technique

There are two basic dead lifting movements. The first is the Romanian Deadlift, and the second is the stiff legged deadlift. We will begin with analysis of the former.

RDL – You can begin by actually having the barbell sitting on the rack. This is what several bodybuilders do. Simply step into the bar, grasp it, and step back. However, it is customary to start from a dead start, meaning that the weight is already on the ground. From this position there are a few rules to be weary of.

You will begin by stepping up to the bar with one of the above stances, and taking one of the prescribed grips from above as well. It is important for back safety to have the bar close into your shins. It is for this reason that many athletes prefer to wear sweats when performing RDLs, because you will want to keep the bar almost rubbing against this region, the entire exercise. Your shoulders should be slightly over the bar. And of course, you will want to have your head and neck inline with the rest of your spine.

Its time to pull! At this stage, you will want to pull the weight up, by extending your legs to bring your body back to an erect position. The key, is to literally attempt to drive your legs through the concrete( if you are at a super hardcore gym ). Again, you will want to keep the chest up and shoulder blades back the whole time, and if you are shooting for maximum power, keep the bar against the shins.

At this stage you will lower the weight back down, keeping all system in check.

Huge Point – We are discussing a vital muscle building process here, and that means strict form. Many people bounce the bar, like a ball every time it makes contact with the ground( which looks incredibly cool when Flex Wheeler is lifting ). But for maximum motor unit recruitment, I would not recommend this. Instead, pause slightly on the bottom to eliminate momentum. You will stimulate a much greater overload of the dorsal complex this way.

SDL – This is an absolutely outstanding exercise, and is explained in our exercise section. You can view it in our exercise section

Again, on the SLD, your gripping and leg spacing are similar to the RDL, but, the exercise is performed, stiff legged. The key here, is to get as full a range of motion, as possible without rounding the back. The rounding of the back places undue strain

on the ligamentous structures of the back. The forces on the lumbar spine are tripled when this occurs.

Note: These are called stiff legged, but I would recommend keeping the knees "soft" meaning, that you will not have them completely locked, but just shy of lockout throughout. The main difference between the stiff legged deadlift, and the bent legged persuasion is that the former eliminates the knee extensors from entering the movement. This provides much greater isolation of the posterior chain. However, the latter allows you to lift a greater load. Both are a must in the battle of the big boys!

## Dead lifting Variations

We will now view several variations of the dead lifting theme.

1. Old School Deadlifts – I call these OS Deads, because Adam Knowlden is who first introduced these to me. They are deadlifts performed with a T-Bar. I will Quote his description of the lift:

" The technique is the same as a dead lift, except you will be using a T-Bar instead of a barbell. I prefer a mid-hand grip position, with my feet centered in the middle of the footpads (this may be different for you, place your feet where you are most comfortable, and can lift the weight in a smooth, controlled fashion). Keeping your head up throughout the set, lift the bar up, pulling with your lower back. As you reach half way up in the range of motion, begin transferring the weight to your upper back until you are standing straight up. That is one complete rep. I prefer to not set the bar down after each rep, to keep constant tension on the back muscles. This means coming as close to setting the bar down as you can (the lower the better), then right before touching pull up again for the next rep. However, for this particular lift the choice is yours. "

2. Cable Deadlifts – Cables provide constant tension to the posterior chain. Both the SLD and RLD can be performed by using a low cable pulley.

3. Dumbbell deadlifts – Again, both the SLD and RLD can be performed here. The difference is that the dumbbells force a greater recruitment of stabilizer muscles.

4. Rack Deads – These are deadlifts performed off an elevated rack, rather than the floor. I recommend a slight elevation off of the ground. This will allow you to go tremendously heavier than you normally would by pulling off the floor, and will add noticeable density. The highest I would normally go is knee high.

5. High Rep Deadlifts on a smith – One of the problems with extremely high rep deadlifts, is that form can break down easily. The smith machine allows the bodybuilder to maintain excellent form, and go high rep at the same time. Which, considering the muscle fiber ratio of the sacrospinalis, this can be an excellent tool.

6. Trap Bar Deadlifts – You essentially perform regular deadlifts here, but with a trap bar mechanism. If you have one at your gym, these are outstanding! I say this because they cut down on injuries tremendously, and still build the dorsal complex.

7. Continuous Grip Deadlifts – These are again an Old School Special. So I will allow him to explain them to you:

The form of the continuous-grip dead lift is the same as that of a regular dead lift, except that you will not be setting the bar down after

each rep. You will bring the bar down as low as possible, until you are just about to touch the floor, then immediately pull back up again.

That's 1 rep. I prefer loading the bar with smaller weights, like 25's and 10's, so I can get even lower to the ground. Therefore, increasing

the range of motion. Adam Knowlden

Benefits – A Massive Back, and increased pain threshold, and python forearms!

8. Enhanced Range of Motion – Notice how Old School discussed increasing his range of motion. The above technique is an excellent one.

You can also increase your ROM, by elevating your feet on a low block.

### One Final Tip

I would recommend warming up before performing pulling movements. The simplest way to perform this, would be to simply execute 2 easy

going, high rep sets of hyperextensions. Do not over stress the movement. The key is to simply promote warmth, and blood flow in the back

region.

### 2. Direct Sacrospinalis work Via The Good Morning

The vertebral column is composed of 5 different subunits, the three most superior are the only ones which are not fused, the latter two share a different fate. The most moveable sect is of course the cervical, followed by the lumbar, and movement is respectively highest in these two regions. This is due to the fact, that the ribs act as splints if you will to the twelve thoracic vertebrae.

In regards to this, the coveted or perhaps even sacred Good Morning movement, is paramount in hitting not only the lumbar, but also building the thickness in the thoracic region of the sacrospinalis. It is astoundingly effective in this area( it more specifically targets thoracolumbar extension).

This exercise is not overly difficult to perform.

Basic Good Morning: (A) Standing with feet a few inches apart, rest a barbell on your traps and shoulders just like with the squat

(B) Slightly bend the knees and keep your back straight, bend forward from the waist, until your upper body is about parallel to the floor, make sure that your head is up during this movement. Hold for a pause, then come back up to the starting position.

Vital Note: Several trainers will have their athletes straighten their legs almost entirely. Finally, never exceed two points. These are the point at which you lose a strong arch, and a point past parallel. EMG shows that past this, simply transfers the load off of the muscles, which strains tendons terribly!

Weight Total – I would not suggest going super heavy. In fact, I recommend being very cautious in this area.

Variations of a Theme – This, like the deadlift has spawned several variations. I would like to convey the best of these here:

Seated Good Mornings – This is a fascinating variation. Its purpose is straight to the point. That is, it relieves tension in the hamstrings so as to emphasize the back region more thoroughly. There's nothing to it. Simply take a seat at the edge of a bench, and perform the exercise.

Arched back good morning - This is very controversial, but many athletes adhere to it. To do an arched back good morning, you will assume your squat stance, then lean forward (keeping your arch tight), when you feel your arch start to give (not too much) you return to the top. The key is to use light weight here at all times! And only let the arch start to give and no more than that!

Squat good morning – Simply go to the gym, and watch a gym moron with no flexibility perform the squat. This is the good morning squat variation!

The key is to again go lighter than normal. Step one is to assume a squatting position. Step two is to squat down to approximately parallel. Step three, is, while maintaining a strong arch, to perform about a 45 to 60 degree angle good morning. Reverse the movement, and then when back in position, squat the bar back up.

Kneeling Good Mornings – Nothin too it. Simply perform the exercise while kneeling on the ground.

Variations, within Variations.

I will now list a few of these variations to the norm:

1. When performing the good morning, keep the hips and glutes still, while only moving the torso.
2. While bending, emphasize moving the glutes backwards tremendously. This minimizes strain on the movement.
3. Use of cables, or dumbbells can call into play a variety of more motor units, not used to being called into play.

Finally, I suggest warming up properly for this. Stretching properly, and being cautious on the weight used. Hyperextensions are again an excellent pre-cursor/pre-fatigue mechanism.

### **Transverso-spinalis**

As described in the physiological analysis, this muscle causes localized rotations in the vertebral column( [click here for description](#) ). This muscle adds direct middle back thickness throughout the entire back region. There are a few ways to target it:

1. Posing – This specific activity, takes a great deal of localized rotation. For example, any twisting movement in a pose directly recruits the transversospinalis. Therefore, immediately after a back workout, posing, with a focus on manipulating the torso can tremendously build this area up! This is also another prime example of why posing is so vital to the sport. To read more about this, [click here](#).

2. Twisting Movements – Any twisting movements will call this muscle group into play. I prefer high rep twists, so as not to overbuild the oblique muscles.

Broom Twists – Simply Grasp A broom, or stick and place it on your neck. From here, twist side to side, in a rotation like manner.

Twists Without Resistance – You can also perform this, by simply placing your hands on your hips and twisting back and forth.

I would recommend, one to three high rep twists to tighten this area of the body up. Even as high as 100 reps. And keep an eye on the obliques, as they can grow rather quickly.

If you would like to see what I am referring to, stand straight up. Now place your hand behind you on your spinal erectors, mid back level. Now twist. At this point you should feel a major contraction in the area!

### **Methods For Erectors and Transverso**

A plan for building these muscle groups might look like this:

Weeks 1-2 - Focus on Heavy lifting movements to hit the erectors, and pose hardcore three times a week.

Weeks 3-4 - Allow Deadlifts to be the main area of focus, and direct twisting movements for the transverso spinalis.

Weeks 5-6 - Switch the emphasis to Good mornings, with light deadlifting work.

Repeat

Note: On each of the weeks, hyperextensions should form a base

### **Final Thoughts**

The Spinal region is extremely complex. I would approach it from this standpoint. Match your hardcore fire and spirit, with an equally determined fervor for proper form and technique. When this is summated, your gains will be unparalleled!

Yours In Sport

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