

GET UP!

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<http://sportkilt.com>

If you like Highland Games...throwing heavy stuff, but you can't see dropping over \$300 for a kilt, see our friends at sportkilt.

Fat Loss Experiment

I went to Moab, Utah one weekend and Las Vegas, a small shanty town in Nevada, the next weekend. It is my patented "I want to be a fat pig" Training Protocol. So, as I watch my "throwing muscles" frown over my belt, it is time again to drop some fat. I am still convinced that pure fat loss is the single most difficult thing for an athlete to do!

I've gone back to the basics...lots of meat and veggies, morning walks with the dog and a few sets of this and that in the weight room. I'm really taking some time off this year to recovery from nearly three years of competitions in various sports with my longest period "off" being only five days.

Look for my picture in many of those "before" shots for weight loss gimmicks.

Our mission? To teach everyone:

1. The Body is One Piece
2. There are three kinds of strength training:
 - Putting weight overhead
 - Picking it off the ground
 - Carrying it for time or distance
3. All training is **complementary**.

Pistols, Handstand Push-Ups & Back Bending

Jim Smith

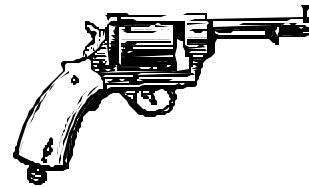
Jim Smith lives in Yorktown, Virginia. Jim has been lifting for years and is always ready to experience new techniques and ideas. Jim's forum, "Animal Ability," is a place where people meet for polite conversation about all kinds of health and strength questions.

About two months ago I started to specialize on some different exercises. The main ones were pistols (one-legged squats) and handstand push-ups on one workout. The other was back bending on my "off" days Tuesday, Thursday, & Saturday.

I'll start with the pistols. Since I'm a personal trainer I also have lots of guinea pigs opps I mean clients to test out my experiments hehe.

Pistols

Let's start with the pistols or one-legged squats. This exercise has been around for quite a long time. Here's the way I do the exercise. Start in a standing position then take a deep breath lift your strong leg in front of you (it's usually a good idea to start with your weak leg performing the work first).



Exhale as you squat down to rock bottom **and** unless you want knee problems **DO NOT BOUNCE!** As you lower you will want to **reach out in front of you**. Let your back round, as a matter of fact you will have to do this so that you will not end up sitting on the floor. As soon as you reach the lowest position drive your heel into the floor/ground and rise up taking another deep breath.

Troubleshooting 101: many of you will find this nearly impossible to perform. Do not despair I have a few helpful hints to enable you to build up to an unsupported pistol.

Partner Assist – Have a partner stand in front of you with your palms down hook your fingers over theirs (partners hands will be palms up). Your partner should help you stay forward and give just enough lift for you to rise.

Rope/Strap Assist – With a rope or strap connected above you hold onto it and use it for balance and lift. This is probably the least efficient way to perform the exercise.

Cable (rubber tubing) Assist – Connect a piece of cable/tubing to an upright about abs to sternum height (you may want to experiment with differing heights). A handle may be connected to the tubing for comfort if desired. Holding with both hands (or opposite hand from working leg) step back so that the tubing is giving you a forward pull. Using this you can just have the forward pull for balance or if needed pull on the tubing to rise up.

Handstand Push-Ups

I just recently got to the point where I can do reps of full range of motion handstand push-ups. By full range I mean hands shoulder level, not

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just to the floor (not that to the floor is a small feat). To do these the first thing you need to be able to do is a handstand against the wall. Once you can do a wall handstand for at least 30 seconds its time to work on handstand push-ups. I like sets with a five-rep goal anywhere from 1-3 sets seems to work best for me.

If you find you can't perform a rep from the floor, which most people can't start by using a short range of motion. A good technique is to use encyclopedias by stacking them up until you only have a few inches of motion with a pad or towel on top. Once you make goal reps on all your set(s), remove a book. Before you know it you'll be touching the floor. Now is the time to get creative because you are now ready to work towards a **true** full range handstand push-up (when most people talk handstand push-ups they are talking from the floor).



My workout partner is a carpenter who owns a fencing company, so you can guess who gets assigned all of my odd jobs. Scott my partner made us some stair type blocks out of 4 x 6s he just put them together so that from the sides they resemble two sets of stairs. Each step is a little less than four inches which is a big jump, but once I had done 2 x 5 on level 1 it wasn't that hard to get a few reps on level 2. If you want you can make smaller steps. Level three is just right for me being around 10 1/2 inches which puts me right at shoulder level with my hands, I suppose I could have made a level 4 to get another inch or so. But for safety's sake I decided to not try to do a shoulder destroying stretch.

Back Bending

With back bending its more of a flexibility developer than a strength developer, but it's a only a static stretch once you get to the position. Having had a bad back a decade ago I had not done much bridging or arching of my back until recently. So I was not sure of my flexibility nor was I too keen on bending backwards with my head falling toward the floor. So I made a plan and here's what I came up with. I have a half cage that has adjustable spotter bars

(you could use a power rack easily or just get creative and use boxes). I also have a shelf/platform that fits across the spotter bars that I use for loading. I set the shelf at a level where I felt certain I could back bend to. I still put a pad on it I would touch my toes to lightly stretch the low back then precede to breath deep and bend back catching my hands on the shelf. I would do 2-4 reps then lower the shelf a hole (which on mine is two inches) and repeat. I continued this until I felt at my limit.

I did this on Tuesdays, Thursdays, and Saturdays; by the second session I was going to the lowest level I could set the shelf. In two weeks I could do my last set on the floor. I can honestly say that my low back is feeling more flexible and loose than before. I did have a twinge or two in the beginning, but if I eased off it immediately corrected itself.

So there you have it three different exercises that you could specialize on that have the following benefits.

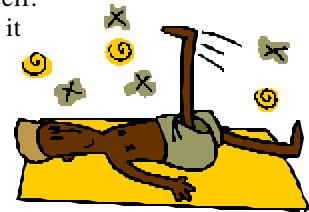
Pistols will build leg and hip strength along with balance, handstand push-ups will build shoulder strength and really help you on your other overhead pressing exercises, not to mention the possible benefits of inverted postures, back bending will greatly increase your spine flexibility.

A further benefit of these three is the fact that the Average Joe can't do them (sometimes the average trainer can't) and will be suitably impressed when you perform them.

Press Up for Back Pain

Matt Spiller

Matt Spiller has been a registered physical therapist in California for eight years. He is credentialed in Mechanical Diagnosis and Therapy a.k.a. The McKenzie Method for neck and back pain. Having weight trained on and off for 14 years, he is currently training for the discus throw. He also plans to compete in powerlifting, weightlifting, highland games heavy athletics, strongman, other track & field events and the Inman mile. He has a webgage available at www.TreatYourOwnPain.com/athlete.html. He can be reached for questions regarding this article at: Lifterrehab@aol.com.



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Why do so many of us strength athletes experience back pain? Our low back muscles invariably are stronger than 'normal' people. And, when in pain, why does it hurt to do simple things like bending over to pick up a pencil or even just sitting?

These questions can be answered quite easily when the source of back pain is identified as the intervertebral disc. The disc is like a jelly donut. The center is a nucleus of a gelatinous material that has the consistency of thick Jell-O at age 25 and hardens up/dries out as you age until it's consistency at age 65 or so is similar to that of frozen steak. Rings of ligaments hold the jelly in the center of the disc.

The design of the disc allows multi-planar movement of the spine and also shock absorption.

The problem comes from the fact that, as a general rule, we round or flex the lumbar spine much more often than we arch or extend the lumbar spine. This excess of flexion causes a slow over-stretching of the ligaments in the back of the disc. Picture a piece of flat taffy that is slowly pulled apart. First, the taffy thins, then you start to see holes. Same thing happens with the ligaments. Now, the jelly center of the disc is not held in place tightly. The loose ligaments allow it to travel posterior. The posterior migration of the jelly puts a pressure against the ligaments, holding them in an over-stretched position.

It has been shown that this highly innervated ligament is the source of the majority (90%+) of low back pain.

It has also been shown that back pain is NOT coming from the muscles of the lower back. The tensile strength of the ligaments is much less than the muscles. Which means that if any tissue of the lower back region gets injured, the ligaments will first. A true muscle strain, if severe enough, will make itself known by visible bruising. This is fairly common in hamstring pulls. Outside of a severe trauma like a car accident, you will never see bruising of the spinal muscles.

Back pain often feels like it is coming from the muscles. This is because the deep ligaments of the disc and the superficial back muscles share the same nerves when it comes to feeling pain.

Unfortunately, a significant portion of treatment for low back pain is aimed at treating the muscles and not the true source of pain.

To relieve pain, we need to get the mechanical pressure off those ligaments in the disc. As an example, right now, pull your index finger backwards as far as you can using your other hand. At one point you will start to feel pain. If you pull farther, your pain will increase. When you let go, your pain will vanish.

Pulling your finger backwards puts a mechanical force (tension) on the ligaments that hold your finger onto your hand. The outer part of the disc is made up of the same type of ligament.

To get the pressure off your posterior annulus ligaments, you need to find a movement of your spine that 'milks' the jelly nucleus back to its' original position. Then you will need to maintain this reduction of pressure as the ligaments scar down and heal up tight again.

The best movement that works for most people to start with is the press-up. This

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movement consists of lying on the floor on your stomach with your hands in the push-up position. Keeping your hips and low back muscles relaxed and your hips on the floor, push your upper body up just to the point of pain or just into it. If pain doesn't stop you sooner, stop pushing up when your hips are about two inches off the floor. Lower slowly. Repeat ten times.

It is okay for your symptoms to increase with this exercise if they do not remain increased after you have finished. Also, your symptoms may change location with this exercise. You want your symptoms to move towards the center of your low back.

For example, if you start with central and left low back pain and left buttocks pain and after the exercise you have the same central low back pain, less left low back pain and no more left buttock pain, that is good. If after the exercise, you have new symptoms in your thigh, that is bad. For about one out of three people, as the pain moves towards the center, the central pain actually increases. Do not be alarmed. Continuation down the same road of exercises should result in eventual complete abolition of your symptoms.

Many people's symptoms will be noticeably better after performing the press-up. If your symptoms are better or even just the same, you should repeat this exercise for ten reps every two hours. If your back pain is constant, you would do better to repeat the exercise every hour until the symptoms become intermittent; Then continue every two hours.

This exercise is not practical for everyone. Lying on the ground is often not an option for many of you. Instead, you can do standing backbends. Standing with feet shoulder width apart, put hands on your low back with fingers pointing towards each other. Bend backward over your hands. Because this exercise puts more pressure on your disc via compression, you should ease into this movement cautiously.

Some people can do press-ups with no problem, but the slightest back bend standing worsens their pain. As long as any pain you cause with the back bend does not remain after you have completed your set, you are okay.

If your low back symptoms remain worse after completing the press-up exercise, you should repeat a set starting pushing up only a little bit on the first rep and slowly working into more and more motion. By the tenth rep, you should be at full range of motion.

If you are one of the few that are still worse after that more gradual progression, instead lie flat on your stomach, with your arms by your sides and your head turned to one side of the other. Take a few deep breaths and try to relax all the tension in your low back muscles. Lie in this position for five to ten minutes.

Then prop yourself up on your elbows so that your elbows are directly under your shoulders. Again, take a few deep breaths and relax all the tension in your low back muscles. After another three to five minutes, re-try the press-ups.

If the press-ups still worsen your symptoms, just lie prone followed by prone on elbows every two hours. If prone on elbows worsens your symptoms, just lie prone. If lying prone worsens your symptoms, you need more help than this little article can give you. I recommend seeing a health professional. See the end of the article for a referral source.

If your low back symptoms remain worse after completing the press-up exercise and your symptoms are greatly one-sided, you may opt to repeat the press-up but with towels folded up underneath the hip on the side of the pain. The towels should compress to about two to three inches.

You may also try towels under one hip during the gradual progression of prone lying, prone on elbows and press-ups.

If, on the other hand, you have a performed press-ups for two to three days, every two hours, with good posture and notice very little or no improvement at all, you most likely need more force into extension. One way is to position your hands so that when your elbows are locked, your hips are two inches off floor. Once you rise to the top position, lock your elbows and exhale through your mouth letting your stomach sag. This sag will increase the

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arch of your spine. Hold this position three to ten seconds each rep.

When performing standing backbends, you almost always can go farther than you think you can. If you have no neck problems, lean your head back as you bend backwards to help you go a little farther. Don't fall! You can also try to "relax" your low back muscles or exhale once you are all the way back to allow you to go a hair farther.

Other methods to increase the extension force more include lying down on a folded ironing board and belting your hips down. Or, you could just have someone else hold your hips down as you push up. Just doing this once or even once a day can "kick-start" your recovery as you continue to perform regular press-ups with a sag throughout the day.

In addition to performing the proper exercise to reduce the disc derangement, you must maintain a neutral spine at all times between exercising to prevent re-derangement. This would be the natural arch of your spine when standing erect. The main concern is sitting.

Using muscular control to maintain the arch while sitting in this position is difficult for any length of time, especially if you are focused on another task. To maintain the neutral spine, simply sit back in your chair as far as possible, roll a towel and place it in the hollow of your low back. When compressed, the towel should have a diameter of about one and one half inches. It should be about an inch above belt-line. Feel free to make minor adjustments up or down an inch or use a slightly larger or smaller diameter.

If you prefer, you may purchase a lumbar roll, a foam cushion designed specifically for this purpose. They may be found in medical supply stores or occasionally stores such as Target, Wal-Mart, K-Mart, etc. The rolls I prefer and which have been shown to last the longest may be purchased from OPTP.com.

You should use this lumbar support at all times sitting. This also means, no sitting on a low chair/couch, no sitting on the floor and no

sitting up in bed. Sitting with your legs straight will cause you to lose the arch of your low back. If you lean back 45 degrees or more, now you can sit with your legs straight and maintain the arch. This position, however, is bad for your neck. But, that is another topic for another article.

Along with sitting correctly, you must not lose the arch during any other daily activities. This means no bending or stooping.

In addition to avoiding flexing your lumbar spine, you should avoid rotation also. The ligaments of the disc are weak in this direction. Flexion and rotation combined are especially bad.

I am guessing some of you just want to know how you can get back to squatting and deadlifting. Well, my guidelines for any exercise or activity are as follows:

1. **No loss of neutral spine.**
2. **No lasting increase in pain.**
3. **No loss of extension range of motion.**

Keeping neutral spine means do not flex, sidebend or rotate the spine. So stone lifting, dumbbell sidebends, and discus throwing are out.

Mild pain during exercise is okay if it does not remain increased for more than about five minutes after your exercise. Make sure any pain returns to baseline before starting the next one. Thus, if your pain does not return to baseline in about five minutes, you know exactly where you went too far. Now, do some press-ups to feel better and avoid the exercise you just did for at least ten more days.

Before you exercise, assess your extension range of motion. The press-up is preferable to standing backbend if able. While you're at it, it would be a good idea to go ahead and do a set of ten extensions before working out. Then, after every set, reassess your range of motion. If at any point you notice a loss of motion, do one to two sets of ten press-ups to regain your motion and avoid the exercise you just did for at least ten more days.

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It's also a good idea to avoid excess compression or loading of the spine. This means using exercises that keep the spine upright, with a relatively light load for low reps per set. So, front squats would be better than back squats to keep the spine upright (as long as you maintain the lumbar arch). One-legged exercise would be better than two-legged to keep the load relatively light.

If your pain is not getting better doing this program, you are most likely doing it wrong. Don't give up too quickly. Most people think this plan is too simple to be effective. The most common errors are:

1) Performing extension actively, not passively.

You need to keep the low back and buttock muscles as relaxed as possible. Do the pushing with arms only. Rolling your legs inwards so your toes are pointing towards each other can help keep the buttock muscles and thus, the low back muscles from contracting as much when pressing up.

2) Wrong direction.

Not everybody responds to a symmetrical extension movement. Twisting the hips with a towel under one hip is one alternative. There are many others. But the majority will respond to extension with or without the hip twist.

3) Poor posture.

If you don't maintain the reduction of pressure between exercising, you are spinning your wheels. The average person loses the arch of their low spine 3000-5000 times a day! You are trying to get this number to 0. Obviously, that would be difficult. But, the less flexing you do, the faster you will get better.

One way to become more aware of your posture is to have someone tape a big X on your low back with the center being at the apex of the arch. A couple strips of athletic tape each way should work okay. The tape is not supposed to stop you from flexing, just pull at your skin when you do, to give you a tactile reminder not to do it.

4) Not performing exercise often enough.

Stretching five times a day is alright, but stretching ten times a day is at least three times better. It takes less than a minute to perform a set. You can't claim "not enough time" as an excuse. Figure out a way to remember to do the exercise. Buy a watch that beeps every hour or something.

5) Too much or not enough force.

Sometimes the press-up (without the hip twist) is the correct direction, but your back can't handle the full movement yet. Lying prone and prone on elbows also extend your spine, but with less force. Do not just blast through the pain if full press-ups are making you worse. Conversely, if full range press-ups do nothing for you, you need to try more force in extension.

6) Too much force too soon.

Sometimes your spine can handle the full range press-up, but you can't just lie down and blast into full range right away. Especially for you older guys with hardening Jell-O. Simply lie prone for a bit, then on elbows for a bit, then ease into press-ups so that by number ten you have reached full range.

Once you are seven days with no symptoms, you can stop performing press-ups so often. A good prophylactic program would be:

- Ten press-ups in the morning
- Ten knees to the chest while lying on your back in the evening immediately followed by ten press-ups
- Standing backbends as needed throughout the day, especially if you do prolonged bending or stooping (bend backwards before you hurt, do not wait for the pain)
- Press-ups/backbends as part of warm-up/cool-down for exercise. Also, in between sets as needed.
- Good posture always. If you slouch for too long you risk pain returning.

The first warning sign of impending back pain is loss of motion of your spine. If you are regularly doing your press-ups, you should

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catch the problem before the pain hits you. The second warning sign is stiffness of the low back, especially in the morning. If this happens to you, increase your press-ups to every two hours and be very strict with your posture until symptoms are gone for two days. Third warning sign...there is no third warning sign. You're in pain again, buddy.

This information draws heavily upon Robin McKenzie's work. A good reference for you wanting more detailed information in the same vein would be McKenzie's book, Treat Your Own Back. If these techniques give you partial relief or even no relief at all, you may benefit from working one on one with a trained McKenzie health practitioner. There is such a directory listed on the McKenzie website at: <http://www.mckenziemdt.org>.

Matt Spiller is a physical therapist credentialed in the McKenzie Method. His website is www.treatyourownpain.com/athlete.html



An interesting Tidbit from Todd Taylor on "The Ring"

"The just completed Masters National Outdoor Weight Throws and Ultraweight Pentathlon provided an interesting match up.

In the Men's 45-49, you had big Jim Wettenhall, the powerlifter, going against the smaller Oly lifter, Dan John, the Ringer (no pun intended :)

Jim is very nimble and agile for a tall/heavy guy; Dan is quick and explosive. In fairness, Jim would never be as great an Oly lifter as he is powerlifter with his very long levers and height. But...all things being equal...I will take the Oly lifter who was giving up about 6" and 75lb.

Technique was about equal. However, in the 98lb weight throw with both of them doing a 1-turn, Dan John's finish (intentional or not) looked just like the "special lift" Kapt Keihas--Jeff Gorski recently alluded to in a Ring post (an explosive hip snatch from a bent trunk position) ...the "explosive power" was very evident.

"Eclectic" in your training approach is the big word Coach Mac threw out there. Power lifting for strength has its place in your training (I say off-season) but the Olympic lifts/variants develop more explosive power.

However, remember when Lance Deal has commented in the past about his lifting, he noted that if he had to do it all over again he would have placed far greater emphasis on core/trunk strength with twists, etc. and puds, etc. for "functional strength."

From our Sponsor Page:

<http://powerathlete.com>

Have you checked out Eric's Coaching Page? Great Stuff!



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