

# Inside or Outside – you can get it done



April 21, 2008

## An understanding of Strength

The definition of strength usually pertains to an amount of force that can be produced maximally by muscles in a single effort. Strength and power are often used interchangeably when discussing the performance of an individual or athlete.



Power is a product of strength and speed. Both are developed through repetition and stressing the musculature until gains are seen.

PatchFitness training operates under the assumption that activities should be fun first and foremost. Strength training, without experiencing an injury, requires proper function of your entire structure and can happen in multiple environments. And strength gains are seen when activities are repeated.

basic exercises. The answers to these questions can lie in a person's ability to perform a lift or movement without injury or fear of injury. Strength training does not have to be restricted to either a weight room or to a Patch "O" Course. Both can accomplish the desired result. And when a person's frame performs functionally, the gains in strength, speed, and power are greater than they would be if merely performed at random. Again, the essential component is whether or not the movement is fun. A movement that results in a smile is one we are likely to repeat, and therefore a strength builder.



## Is Strength a Product of Function?

When would it be appropriate to lift weights vs. doing a Patch workout? Are weights a good idea when it comes to strength training? Can I achieve results in a different way? These are the kinds of questions that health professionals are faced with when evaluating the ability to perform even the most



## **Donkey Kicks - Why this exercise?**

The movement of extending the body has many purposes, not the least of which is that the muscles of extension keep us standing upright. To properly train these muscle groups, we must put ourselves in positions that would require them to work according to our design. This exercise will train the muscles of what is called the posterior compartment, or back side of the body. By starting in a position of flexion and progressing to a fully extended position, the posterior compartment will need to recruit properly in order to accomplish the

finish position – the handstand. By the shoulders absorbing the weight of the body throughout the movement, the pelvis is free to move correctly. In fact, if one is not able to get to a handstand position, it can represent an inability of the participant to engage the muscles of the pelvic and hip region correctly. Consequently, the shoulders will feel as though they are taking the brunt of the workload for this exercise and a feeling of “I am not strong enough in my shoulders” will follow. Although the lack of strength in this region may be a valid issue, it is more likely that the person performing the Donkey Kick is unable to recruit properly throughout the movement. When sequencing this exercise, place it at the front or middle of the routine.

## **What about the weight room?**

This exercise will be a good complement to shoulder routine focusing on Deltoid, Triceps, and Latissimus work. This will remove the possibility of the “I am not strong enough” excuse and focus the workout on the dysfunction of the hips and pelvis.

## **What are the most common mistakes?**

Participants tend to bounce or hop between repetitions. Taking a small hop allows ones momentum to carry them into the next repetition rather than force correct recruitment. This tendency will be stronger if the hands are starting on a platform higher off the ground. To correct this tendency, perform each repetition from a stand still position or begin without using a platform and start with your hands firmly on the ground. This will allow your center of gravity to get over the base of support quicker and remove the tendency to hop.



## Stump Jumps - Why this exercise?

This exercise will train the muscles of what is called the posterior compartment, or back side of the body, and train the body to transfer its weight side to side. By starting in a position of flexion and progressing to a fully extended position, the posterior compartment will need to recruit properly in order to accomplish the finish position. The lateral compartment of the body, or sides of the body, must stabilize when the weight is transferred. By the shoulders absorbing the weight of the body throughout the movement, the pelvis is free to move correctly. As in the exercise



Donkey Kicks, the hips and pelvis must recruit properly to get the body moving toward a handstand position. However, now that the body is moving from one side toward the other, the lateral compartment must stabilize the movement to avoid twisting. The shoulders will feel as though they are taking the brunt of the workload for this exercise and a feeling of “I am not strong enough in my shoulders” may follow. This will be especially true if the participant is unable to extend their legs. Upper body strength is important to properly perform this exercise. However, it is more important to prevent twisting than it is to extend the body into a handstand like position. This exercise should be placed in the middle or at the end of any sequence.

## What about the weight room?

Exercises that compliment proper function of the Abdominals, Obliques, and Lower Back will assist in performing this exercise well. Full Sit Ups is a fantastic way to accent the function needed to perform this exercise correctly.

## What are the most common mistakes?

By far the most common mistake is breaking down the form of the exercise to try and extend the legs. The arms will bend and the feet may separate throughout. This will indicate that there are strength issues in the upper body and improper recruitment of the lumbar spine and pelvic extensors. To avoid this, one should focus on a controlled take off and landing with little or no attention being paid to trying to extend the legs at the top of the movement. This movement of straightening the legs can be added as the participant is performing with good form within a controlled movement.



## **Step Ups - Why this exercise?**

The muscles of the hip and pelvis are the primary source of athletic power and locomotion. We often take our training to points where we are increasing power and speed using these muscles. This exercise focuses on taking the hip joint through a functional range of flexion and extension while eliminating any tendency to compensate for a lack in ones functional range. Many of our daily obstacles – stairs, steps, and hills – are not at a high enough angle to truly test our hips range and thus keep it functional. The hip and knee are designed to step over something that requires 90 degrees of flexion at both the knee and hip, yet we seldom get the opportunity to use this function. This

exercise will also promote thoracic extension, as the participant will need to fight the upper body's tendency to flex the trunk over the knee during the movement. This exercise should be placed near the beginning of any routine.

## **What about the weight room?**

Bench Press and other chest and upper body exercises are perfect compliments to this exercise. It is also a good exercise to use when strengthening the lower body. The muscle groups being worked are similar to those being strengthened by doing Lunges; however, it is not redundant to use Step Ups with Lunges on the same days.

## **What are the most common mistakes?**

This exercise is surprisingly easy to do incorrectly. The most common mistake happens as a result of a hip dysfunction. The knee will tend to collapse toward the midline of the body while stepping up. This can be remedied by one of two things: 1) Try to control the bent knee while stepping up, or 2) Step onto a lower surface, thus lowering the demand of the exercise. The other most common mistake involves rounding or flexing the upper body over the knee while stepping up. To avoid this, try and maintain an erect posture throughout.



## Stork Walks - Why this exercise?

Proper function of the hip is critical to so many movements and the body's ability to maintain a healthy posture. The flexors of the hip are responsible for much in the way of stability and power. This exercise promotes both correct movement and balance. Balance and its importance to movement are overlooked by many activities we embark upon due to the speed at which we perform most activities. Both hip flexion and balance are fundamentals to movement. This exercise should be considered a cornerstone to any program. This exercise due to its versatility and importance can be used at any place within a sequenced routine. However, you will find it near the beginning or even

in a "Pre workout" most of the time as it prepares the hip for more rigorous activity.



## What about the weight room?

This exercise is appropriate to accompany just about any workout. As the focus of the exercise is to promote function and not increase strength, adding weights to the ankles or legs is not recommended.

## What are the most common mistakes?

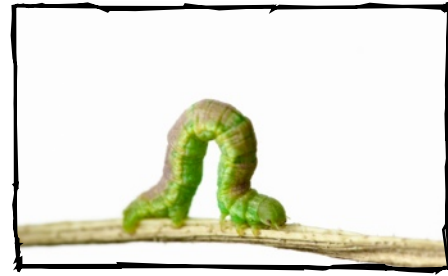
The most common mistake made when performing this exercise has to do with the speed at which it is performed. It is not meant to be done in haste. Rather, it should be performed methodically and under control.



## Inchworms - Why this exercise?

This exercise focuses on the function of the hips, pelvis, and spine. While moving through both the ranges of flexion and extension during the exercise, the body must transfer its weight through all of the load joints. In the presence of dysfunction, the demand of this exercise causes a breakdown in the body's ability to hold form. The shoulders must bear weight, the legs must stay straight and in a locked position, and the limited movement of the hip all combine to produce a deliberate and controlled exercise that will challenge you every time. The Inchworm promotes pelvic flexion and extension above all. In fact, should you have a pelvic dysfunction, this exercise should be in your workouts

often. It does task the entire body, and a de-conditioned athlete will feel as though they have performed more work than the exercise appears to offer at first glance. When attempting to add Inchworms to a sequence, place near the end of the routine. This exercise is a great way to finish a routine.



## What about the weight room?

There is a space requirement for this exercise. Moving across a room, down a hallway, or across a field may be required. Lower body strength routines are a good compliment to this activity. Exercises like Knee Extensions, Hamstring Curls, and Lunges will escalate the demand of Inchworms.

## What are the most common mistakes?

The most common mistakes are due to a breakdown in form. Knee flexion during the walk toward the hands is probably the most common. An inability to find and recruit the primary hip flexors while the knees are extended is to blame. The result is the participants need to recruit secondary hip flexors with a bent knee.



## Side Crabs - Why this exercise?

Excessive flexion of the thoracic back is a common postural deviation. The dysfunction associated with this posture is obvious – diminished ability to extend the thoracic back. Side Crabs require the thoracic back and pelvis to extend and remain there while moving laterally. This will prove to be very difficult for those with forward rounded shoulders or a tight upper back. This exercise has an uncanny way of targeting both a thoracic dysfunction as well as a pelvic dysfunction, which makes it a good choice for just about any workout. The demand of this exercise makes it necessary to place it in your routine near the middle or end. A solid “Pre workout” routine that includes a shoulder sequence is recommended to get

the most out of the exercise. This exercise should be near the end of any routine rather than at the beginning.

## What about the weight room?

Upper body exercises are not the first choice to accompany this exercise. A good shoulder position should be a prerequisite for Side Crabs. Performing upper body weight routines may fatigue the structure enough as to encourage a bad position while doing side Crabs.

## What are the most common mistakes?

Typically, the participant will drop the pelvis while moving. It is important to keep the hips high and level while moving to the side. You may want to consider breaking the exercise up into smaller sets and repetitions initially to avoid form breakdown..



## **Bear Crawls - Why this exercise?**

This is an exercise that is used in multiple environments. Bear Crawls can be performed on the ground, over uneven terrain like stairs and hills, and on the logs of The Patch® “O” Course. It is a versatile exercise that works on the function of the shoulders, hips, knees, and ankles. It emphasizes multiple planes of movement simultaneously. While one hip is moving to flexion, the other is moving to extension. While one shoulder supports the weight of the torso the other is flexing to be in position to do the same. The sides of the body are working in opposition to stabilize and move. Cross patterning arm and leg movement is happening with every stride. This movement is something we see when we walk.

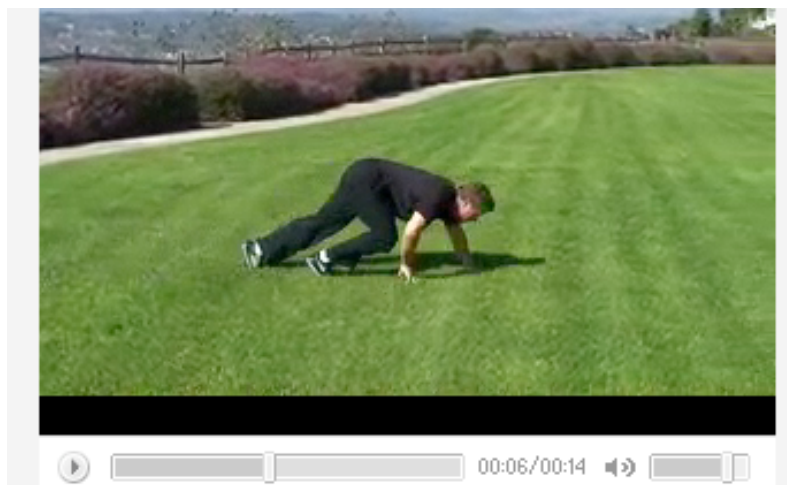
It is where one arm swings forward and the opposite leg is coming forward at the same time. This movement is important to reduce torso rotation when we move. The pelvis needs to extend and flex throughout the different phases of the movement. And the body is shifting weight in both the upper and lower body throughout the exercise. The focus of the exercise is to extend the spine while using the shoulder and hips for stability and movement. The tracking of the thigh in a front to back motion through each stride is critical. And keeping ones weight as centered as possible is a consideration that will promote proper balance and weight distribution. Good form may be affected by fatigue, but it should not affect where it is placed in a sequence.

## **What about the weight room?**

This exercise can be used in conjunction with just about any weight routine whether upper or lower body.

## **What are the most common mistakes?**

Those with poor pelvic function make the most common mistakes with this exercise. This is seen as excessive rounding of the back and a pronounced wobble. This dysfunction will be seen clearly the more the movement is performed on a log or balance beam. The result will be a lack of balance as well as the obvious visual of the back rounding in flexion.



## Front or Side Unders - Why this exercise?

Transition from one load joint to another when it comes to weight distribution is something we readily understand. It is a principal we understand clearly when it comes to static positions. We see it when we transfer weight from one leg as it tires and so on. The principal of transition is also important when we move. In this case, we are transferring the movement of extension from the upper back then to the middle back then to the lumbar spine then to a flexed hip and so on... Functionally, this movement requires stability out of the all of the load joints. It also requires a reduction of rotation from the torso during the movement. The body works as a unit, and few

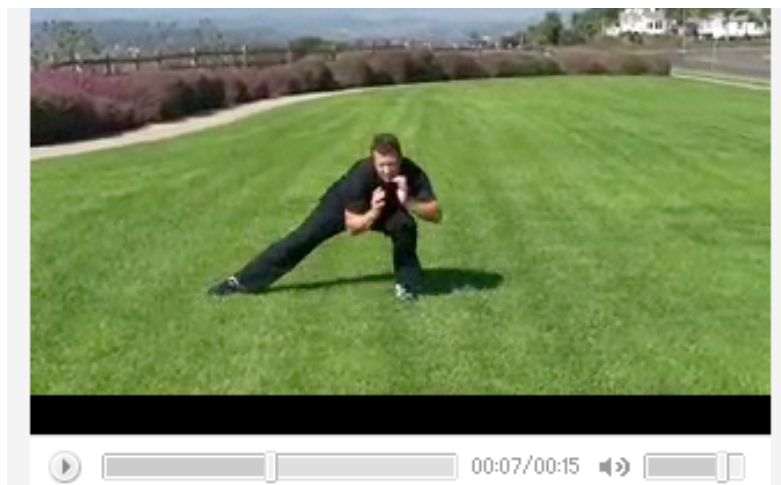
exercises demonstrate this as well as Unders. It is often compared to Lunges, as you will feel the Quad and Gluteal muscles getting their appropriate amount of impact for their effort. However, the exercise is most effective when the height of what you are going under is varied. This will involve the upper body is slightly different ways and improve the effectiveness of the exercise on your function. This exercise is great for the beginning of any Patch routine.

## What about the weight room?

This exercise is a great warm up for any weight routine. Assuming that you have something to move under it can be performed with relative ease in any weight room.

## What are the most common mistakes?

The most common mistake made with this exercise is to raise the hips vertically without extending the lumbar spine. This can happen if the participant does not take a large enough step. The resulting narrowed stance causes the hips to rise early in the movement. Keeping the center of gravity low throughout the movement will help to eliminate this problem.



With all the exercises available on PatchFitness.com, you can begin creating your own routines while working out in any environment. And whether you choose to use a more traditional facility with weight benches and some of the most modern equipment available, or turn a walking path into your own “O” Course, the only real limit to what you can do is found in your imagination.

Create a series of routines and mix in some weights. Feel free to share them with your fellow tomatoes on PatchFitness.com **...Go Play!**

