



# **FLEXIBILITY**

## **FOR HEALTH & FITNESS**

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**LEARN ABOUT**

**STATIC STRETCHES**  
**ISOMETRIC**  
**STRETCHES**  
**BALISTIC LEG SWINGS**

**FLEXIBILITY**  
**PROGRESSION**

**SAFE AND EFFECTIVE**  
**STRETCHING**  
**PROGRAM**

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Robert Barnett is the author of several new eBooks and his groundbreaking “The Barnett Training System” was first published in 2002. He was a Powerlifting champion and he is currently a 7th Degree Blackbelt in Kenpo. Robert is a graduate of USC and Cornell University. He has been a fitness trainer for the last 17 years and has been weightlifting himself for over 40 years. He is married and has four children.

## FLEXIBILITY FOR HEALTH & FITNESS

Stretching is easy to learn and yields several benefits. If you stretch regularly and correctly, stretching can benefit your fitness training tremendously. Stretching the fascia allows for maximum muscle growth, and it decreases soreness resulting from hard fitness training. Most importantly, stretching regularly can help you prevent injuries.

Flexibility is joint specific. Some joints can be more or less flexible than average. Flexibility in a joint depends upon the joint surface, the length and elasticity of ligaments, and the elasticity of muscles. Flexibility can be improved upon by anyone and at any age. There are three kinds of flexibility for our purposes: Static Passive, Isometric and Ballistic.



### STATIC PASSIVE STRETCHES

Static passive stretching involves relaxing our muscles into a stretch and holding the position. We suggest holding our upper body stretches for 30 seconds. We hold our lower body stretches for 1 minute or longer. I would suggest that you do your static stretches after you have warmed up on the treadmill.

## ISOMETRIC STRETCHES

There are several methods of doing isometric stretches. The method we have found to be most productive is to stretch the muscles as much as we can, and then tense for five seconds. Through successive tensions and relaxation, stretch further and further.



### 1. Low Hamstring Stretch

As an example, we will use the Figure 4 Hamstring Stretch. We get into position with our left leg extended, and begin relaxing our lower back by holding a very light stretch. We try to be very precise and focus on form and relaxation. We lead with our chest and we keep our back from rounding. We concentrate on relaxation. After about 30 seconds, our backs will begin to relax and we will be able to stretch forward a little more.

Again, we relax into the stretch and bend forward at the waist, leading with the chest. Now the hamstring stretch is moderately painful.

Next, we will switch to the other leg. Once we have reached this stage with the right leg, we will switch back to our left leg. This time we will be able to work into a good hamstring stretch fairly quickly.

Now we begin to use isometric stretches. We will push the extended right leg into the floor with an all-out effort for 5 seconds. We will immediately relax and attempt to stretch further. We will repeat this sequence of tensions and relaxation four or five times. Lastly, we will return to a light passive stretch focusing on relaxation. We now switch to the left leg and repeat the tensions and relaxation, and the final passive stretching.

## 2. High Hamstring Stretch

The High Hamstring stretch can be easily done with a partner, and isometric stretching is very effective with this stretch. We lie on our backs and extend one leg up toward the ceiling. We hold the other leg flat on the floor. Our partner will stand above us and hold our ankle. Our partner will gently push our extended straight leg back toward our head. Once we have reached a maximum stretch with this technique we will switch to isometric stretches. We will attempt to force our leg down for 5 seconds as our partner resists. We will repeat this sequence of tensions and relaxation four or five times. We will then repeat the same procedure with the other leg.

### BALLISTIC LEG SWINGS

Ballistic Leg Swings are very effective. However, they are the most advanced stretch and can cause injury if we are not very flexible. Conditioned muscles are easier to stretch than unconditioned muscles. We strengthen our legs with squats, leg extensions, and leg curls. We start flexibility training with static passive stretches. When our legs are better conditioned and when we have better flexibility, we can then use ballistic stretches.

### FLEXIBILITY PROGRESSION

Stretching has to be progressive or we will actually hamper our flexibility, and we will be more prone to injury. You have to take time with flexibility training.



## Safe and Effective Static Stretches

### OVERHEAD REACH

Stand with your feet shoulder width apart. Interlace your fingers above your head. Turn your palms upward, and push your arms up and slightly back. Hold this stretch and try to elongate your spine.



## NECK STRETCHES

Old neck rolls are out. The new, safer technique is to lean your head toward the right, and with your right hand, pull your left arm down and across behind your back. Repeat this sequence by leaning your head toward the left. Next, stretch to the front by touching your chin to your chest, and finish by stretching to the rear by pointing your chin to the ceiling.



### TRICEPS STRETCH

Stand with your feet shoulder width apart. With your arms overhead, bend your left arm and hold your elbow with right hand. Gently stretch your left elbow straight up. Repeat this sequence with your right arm.



## BICEPS STRETCH

Stand with your feet at a shoulder width apart. Position yourself at arm's length from a bar or other vertical structure such as a doorjamb. Turn your feet 90 degrees to the right and extend your left arm at head level, hold the bar or doorjamb, and rotate your body to the right in order to stretch the biceps. Repeat the sequence with your right arm.



## BACK STRETCH

Stand with your feet slightly wider than shoulder width apart. Bend your knees and bend forward from the waist. Hold onto a bar, or other stationary object, with both hands -- fingers interlaced. Squat down somewhat and pull back. The shoulders will roll forward and relax, and the stretch will be felt in the Lats.



### STANDING SPINAL TWIST

In Tai Chi it is said, "you are only as old as the spine is flexible". Therefore, I feel this stretch is very important. Stand facing away from a wall, and then rotate your hips and your upper body toward the wall. Place your hands on the wall. Repeat on the other side.



### CALF STRETCH

Stand about three feet away from a solid support and assume a lunge position. Push the heel of your straight back leg down. Now bend the knee of your back leg, and again push the heel down. With your knee bent you will feel the stretch lower in the calf and in the Achilles tendon. Repeat the sequence with your other leg. You might also look into purchasing a "Prostretch" by Flexible Fitness for stretching the calves -- it works great.



### BUTTERFLY

Sit on the floor and place the soles of your feet together. Pull your feet in toward your groin. Gently pull yourself forward and press your knees down. Go slow with this exercise in that the groin muscles can be easily strained.



## PSOAS

The Psoas stretch is a great exercise to relieve lower back pain and knee pain. Drop to one knee and get into a balanced lunge position. Keep the knee of the back leg on the floor, stay upright and push your hip forward. You will feel the stretch in the hip and quad of your back leg.



### BEND AND REACH

Sit on the floor, keep your legs together, and extend them forward. Begin to bend forward leading with your chest. Attempt to touch your toes without bending your knees. You should feel the stretch in the hamstrings and in the lower back. Be careful not to strain the lower back by rounding it. Instead, keep your back straight and lead with your chest.



### KNEE TO CHEST

Lie on your back and bring both bent knees up to your chest. Wrap your arms around your knees and hold tightly. Bring your forehead up to your knees for a few seconds and then lower your head. Hold this stretch for about thirty seconds and repeat. It can also be performed one knee at a time with the other leg extended and pressed down on the floor. This is a very important stretch in that it is the primary flexibility exercise used for lower back flexibility and rehabilitation.



#### FIGURE FOUR

Sit on the floor and extend one leg in front of you. Bend the other knee and place the foot against the extended thigh. Bend forward leading with your chest. Like the "Bend and Reach", be careful not to strain your lower back by rounding it. Instead, keep your back straight and lead with your chest. This stretch is the primary hamstring stretch and is frequently used with the "Knee to Chest" to ease low back pain.



#### SEATED SPLITS

This exercise can be painful; therefore, hold the stretch for several sets of short duration. I would suggest six stretches held for 20 seconds each.



## LUNGE STRETCH

This stretch works the quads, groin and hamstrings, and like the prior stretch, this exercise is also somewhat painful; therefore, hold the stretch for several sets of short duration. Again, I would suggest six stretches held for 20 seconds each.



## HIP STRETCH

This stretch is used to prevent and relieve sciatica problems. Lie on your back and extend your left leg forward on the ground. Bend your right knee up to your chest. Rotate your knee toward your left side and then stretch your hip further to your side. Remember to keep your shoulders flat on the floor. Repeat on the other side.



### STANDING QUAD STRETCH

Hold onto a bar or any stable stationary object. Grab your right ankle with your left hand behind your back. Straighten-up and push your knee down. The stretch is more effective if the emphasis is on pushing the knee down, rather than on pulling the ankle up. Repeat with the other leg.



### COBRA STRETCH

Lie on your stomach and place your hands in a push-up position under your shoulders. Push up with both hands, keeping your legs down on the floor. Stretch up slowly arching your back. Your arms should be fully extended when your back becomes more flexible. This exercise is particularly good after abdominal exercises.



## STRETCHING SUMMARY

- Do not stretch aggressively as beginner. Get a slight stretch and increase the range after you feel your muscles relax.
- Hold your stretches in a comfortable position. Every 10 to 20 seconds the tension should subside and you will be able to stretch further.
- Breathe slowly, deeply and naturally. Hold your abs in - do not allow your abs to protrude.
- Do not do ballistic stretches initially. Bouncing tightens the muscles you are trying to stretch. Start with static stretches.
- Focus on the muscles being stretched. Feel the stretch. If the tension becomes greater as you stretch, you are over-stretching.
- Your flexibility will vary daily. Some days you will be more tight or loose than other days.
- Regularity and relaxation are the most important factors in stretching. Make stretching an integral part of your fitness program.