Developed by Richard L. DonTigny, PT

**Purpose**: A program for the immediate relief and prevention of occurrence of common low back pain, with special emphasis on the sacroiliac joint.

For use by medical professionals to provide instructions for the home care of patients with low back and pelvic pain.

This program is divided into eight parts:

- Assisted corrections
  - Traction corrections
  - b. Direct corrections
- 2. Self-Corrections
  - a. Traction corrections
  - b. Direct corrections
  - c. Isometric corrections
- 3. Stretching exercises
- 4. Strengthening exercises
- 5. Sit to standing exercise
- 6. Standing hip flexion and hip abduction exercise
- 7. Flexibility and strength training for neck and upper back
- 8. Fascial release through PNF patterns

Two things are absolutely essential for the relief of low back pain.

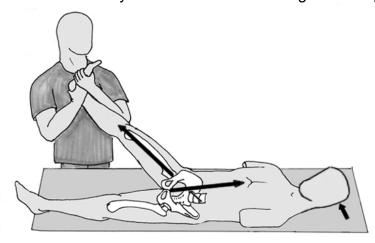
- 1. **For the relief of pain**, correction of the sacroiliac joint to the position of ligamentous balance.
- 2. **For the prevention of onset or recurrence**, when you are leaning forward to lift, bend, or lower, or if you are pregnant hold a strong active pull upwards on the front of the pelvis with your abdominal muscles.

#### **CAUTION:**

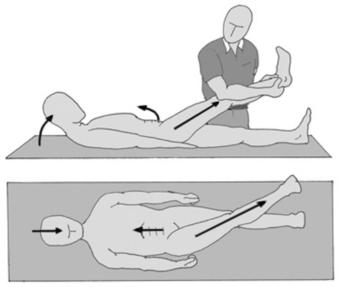
- 1. Do not attempt corrections if your SIJ has been fixated or fused.
- 2. If you have numbness or weakness or loss of bowel or bladder control see physician before continuing.
- 3. You may not be able to get a correction if you have had proliferant injections into the iliolumbar ligament or if you have a spondylolisthesis.

### Assisted corrections Traction

With the patient supine, lift the leg gently to about 45° of PSLR and apply traction sufficient to lift the buttock on that side. Patient is instructed to tighten the abdominal muscles and to lift the head to reinforce the correction. Repeat on the other side. Repeat 2-3 times on each side, alternating sides each time. Anyone in the household may be instructed in assisting with this procedure at home.



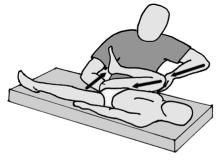
If the patient has been treated improperly in the traditional side-lying position, it may be necessary to apply traction with a flank stretch at the same time. Follow-up with strong muscle energy corrections.



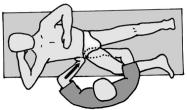
#### **Notes**

### Assisted corrections Direct corrections

Stretch the knee along side of the chest, beneath the axilla, while lifting with one hand under the ischial tuberosity and pushing caudad on the shaft of the femur.

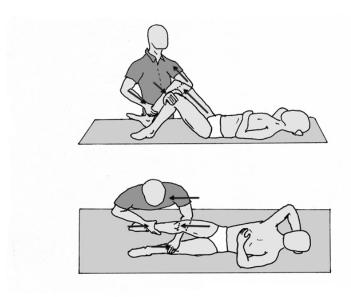


Or place one hand under the ischial tuberosity and the other as far back as possible on the back part of the iliac crest and rotate the pelvis firmly posteriorly.



#### The EZ Fix

Place one forearm under the proximal knee with the hand on the front of the contralateral knee. Place the other hand on the foot with just enough pressure to keep the foot from rising. Put traction on the proximal pelvis by just leaning the trunk backwards. Repeat on the other side.

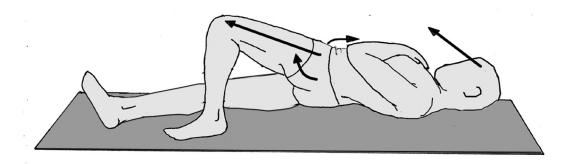


#### Notes

#### **Self-traction corrections**

Lie supine. In order to pull the back of the pelvis down, with the foot flat push the knee out until the buttock rises on that side.

At the same time to bring the pelvis up in the front raise your head and tighten your abdominal muscles.



This correction can also be done while standing against a wall. Be sure you hold strong support on the front of your pelvis with tight abdominal muscles when lifting and lowering your leg; otherwise the weight of your leg will cause the pelvis to rotate forward and downward again.



#### Notes

#### **Direct Corrections**

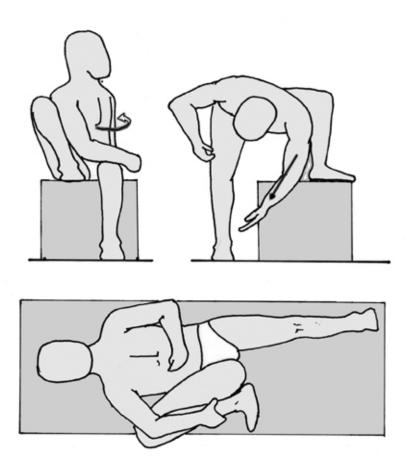
It is not necessary to lie down to do corrections. Corrections can be done at nearly any time depending on what position you are in at the time.

If you are sitting, simply put one foot up on the chair next to you and bring the shoulder on that side forward just ahead of that knee. Repeat on the other side.

Do each side 4-5 times alternating sides each time.

If you are standing, put one foot up on a stool or chair seat and reach the arm down toward that foot. Repeat as above.

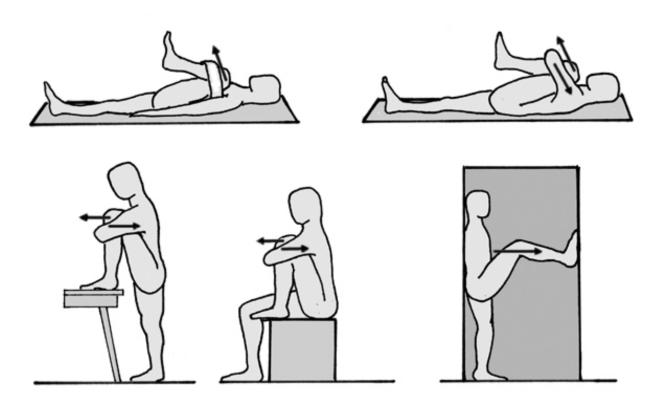
When you are lying supine bring one knee up along side of your chest, put your elbow on your knee and grasp your leg. Pull that knee in and back toward the bed. Repeat as above



#### Notes

### Isometric or muscle energy corrections

In whatever position you happen to be, hold your knee tightly to your chest with both arms and then push your knee out against your arms. Do both sides, several times on each side, alternating sides each time.



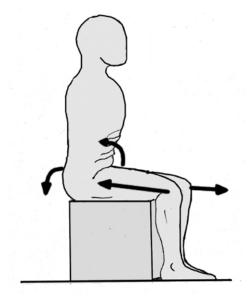
A luggage belt placed behind the upper back to in front of the knee provides excellent resistance as does standing in a doorway.

#### **Notes**

#### **Seated corrections**

To correct while sitting at home, or in a car Action: Sitting, pull the right thigh back and push your left thigh forward firmly while tightening your abdominal muscles and pinching your buttocks together. Hold 5-6 seconds.

Repeat on the other side. Do each side several times alternating sides each time.



#### Enhanced seated correction:

Action: Seated, pull the left thigh back and push your right thigh forward. Put both hands on the left knee, tighten your abdominal muscles, pinch your buttocks together and push down hard on the left knee. Hold for six seconds. Repeat on the other side. Do each side 4-6 times, alternating sides each time.



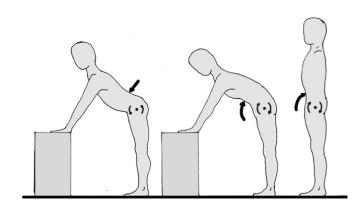
#### Notes

Posture practice

Poor posture: Head is forward, off balance, causes tightness in the neck muscles, flattens the chest, decreases ability to breathe deeply. Pelvis rotates anteriorly and downward. Hip flexors are impaired. The knees are curved backward. When walking, instead of bring the foot forward with the hip flexors, the individual externally rotates the leg and brings it forward with the hip adductors. On heel strike the knee is driven medially causing a valgus knee. Instead of decelerating over the big toe, you decelerate over the inside edge of the big toe driving it laterally and causing bunions.

Optimum posture: Head is erect and balanced on the neck.
Breathing is deeper and easier. The pelvis rotates posteriorly and upward. Knee is no longer curved backward. Normal deceleration occurs over the feet.

Posture practice: To practice erect posture. Action: Standing, bend forward from the waist and put both hands on a table or counter. Tighten the abdominal muscles to lift the front of your pelvis and round your low back. Straighten up your body while holding the abdominal muscle tight. Keep you chin tucked in and your weight behind the hip joints.



#### Notes

### Stretching exercises

Do your corrections before and after stretching.

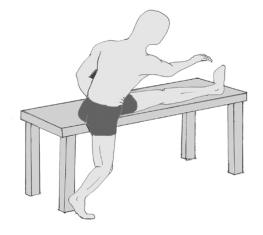
Hamstring stretch

Sit on the edge of a table or a bed with one leg outstretched as shown.

Action: Flex your trunk down toward the leg slowly for several seconds. Keep your knee straight.

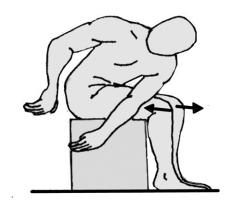
Repeat on the other side.

Repeat daily until you can nearly touch your head to your knee.

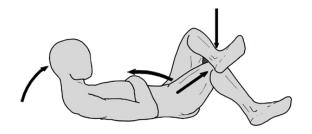


Rotation stretch. To safely stretch the abdominal oblique muscles, the latissimus dorsi, the sacral origin of the gluteus maximus, the multifidus, the quadratus lumborum, the piriformis and others.

Action: Seated, pull your right thigh back and push your left thigh forward. Flex your trunk and twist it to the right as far as possible. Repeat on the other side. Stretch both directions.



Flank stretch: To stretch the tensor fascia lata and help restore function to the sacroiliac joint. Action: Lying supine, lift the head to tighten the abdominal muscles, put your left heel on top of the right knee and stretch the right knee down and to the left. Repeat on the other side.



#### Notes

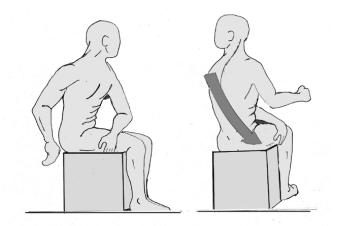
### Strengthening exercises

Do your corrections before and after strengthening exercises.

Isometric rotation exercise is to build strength in the abdominal oblique muscles, the latissimus dorsi, and the sacral origin of the gluteus maximus, the multifidus, the quadratus lumborum, the piriformis and others. Seated, with the left hand grasp the right leg on the outside just below the right knee.

Action: Rotate your trunk toward the left, thrust your right thigh forward and draw your left thigh back, giving yourself resistance with your left hand.

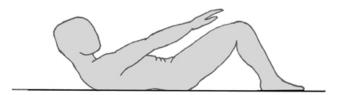
Repeat on the other side.



Crunches build strong abdominal muscles that are critical to this program.

Lie supine and just lift your head as high as possible. Repeat 25 times.

When you can do this without effort lift your head and shoulders and reach your hands out over your knees. Work up to 25 repetitions



Do no single or double straight leg raising unless you can hold an exceptionally strong pull on the pelvis with the abdominal muscles.

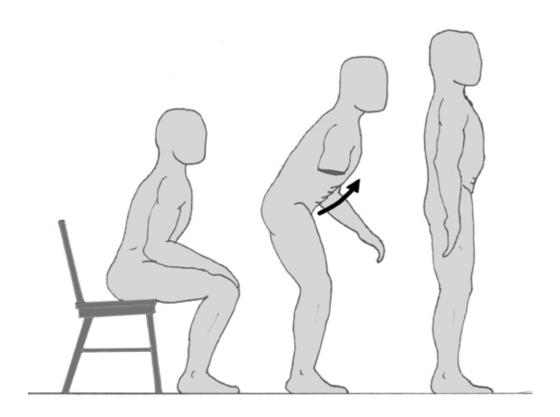
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### **Sitting to Standing**

Rising from sitting can be difficult and painful.

To rise without pain, first, scoot to the front part of the chair. Lean forward. Place your hands on your knees.

As you stand, tighten your abdominal muscles to bring up the front of your pelvis. If you try to stand without bringing up the front of your pelvis you will stress the sacroiliac joints



#### **Notes**

### Standing hip flexion

Standing hip flexion: This is an essential exercise so that you will be able to go up and down steps without back pain.

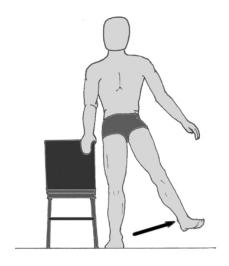
Action: Standing with one hand on a chair or table for balance, tighten your abdominal muscles to hold up the front of your pelvis and then lift one knee as high as you are able.

Repeat on the other side. Repeat 10 times on each side.



### Standing hip abduction

Hip abduction provides necessary stabilization when walking. Action: Standing with one hand on a chair or counter, tighten your abdominal muscles to lift the front of your pelvis and then raise one leg up and out to the side. Hold for 5-6 seconds and repeat five times. Repeat on the other side.



#### Notes

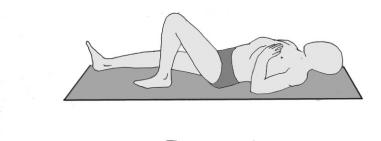
## The DonTigny Dynamic Core Stabilization Program Stretches for low back, upper back and neck

### THE ALL -IN-ONE EXERCISE

This is a very good method to stretch and strengthen a dorsal kyphosis (round upper back) and a forward head posture. It will help you to stand much straighter. This should be done under professional supervision at first.

Begin easy and stretch slowly.
Hold stretch for 10-20 seconds.
Repeat daily until you can hold an erect posture.

To mobilize the SIJs, the neck and upper back. Begin with the hip and knee bent and the foot flat.





on the same side. Lower back down and repeat 3-5 times.(Continue on next page)

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## The DonTigny Dynamic Core Stabilization Program Stretches for low back, upper back and neck

ALL-IN-ONE EXERCISE (2)

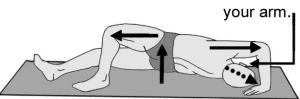
Now flex your shoulder and elbow and place your hand along side of your head with the fingers pointing

down.

Push your knee toward your foot and your elbow toward the top of the table raising your buttock and arching your back. Roll back. Repeat 3-5 times.

### ALL-IN-ONE EXERCISE (3)

Again, note the hole under



Push with your knee and elbow and put the back of your head through the hole and look at your hand. Roll back. Repeat 3-5 times.



head through the hole and look down at your foot. Roll back. Repeat 3-5 times. Do to both sides.

**Notes** 

# The DonTigny Dynamic Core Stabilization Program Fascial release through PNF patterns

### Fascial tightness.

Stretching through PNF patterns.

Fascial tightness may be present in the buttocks and Internal and external rotation of the hip.

This may give a false positive Patrick's test.

This motion can be regained with gentle stretching.

Especially effective are contract/relax stretching techniques in the lower extremity primitive motion patterns used in proprioceptive neuromuscular facilitation.

Be sure you do a corrective exercise before and after these exercises.

### Stretching Fascia (1) The Outer Hamstrings



Sit with one leg straight out on a table or bed. Twist bend and reach to touch the table on the far side of the outstretched leg. Stretch for 1-2 minutes. Repeat on the other side.

Notes

## The DonTigny Dynamic Core Stabilization Program Fascial release through PNF patterns

STRETCHING FASCIA (2)

The inner hamstrings

Sit with one leg straight out on a table or bed.

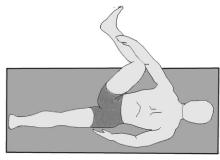
Twist, bend and reach down toward the floor just on the inside of the outstreched leg.



Stretch easy for 1-2 minutes. Repeat on the other leg.

### STRETCHING FASCIA (3)

For the hip extensors, adductors and external rotators



Lie on your back on a bed or table and bring your leg up and out to the side as indicated. Stretch easy for 1-2 minutes. Repeat on the other leg.

Notes

# The DonTigny Dynamic Core Stabilization Program Fascial release through PNF patterns

STRETCHING FASCIA (4) Hip abductors, internal rotators, quadratus lumborum

Lie on your back on a bed or a table



Swing the right leg over your left, twisting your lower trunk.

Let stretch for 1-2 minutes. Repeat on the other side.

### STRETCHING FASCIA (5)

Hip extensors, abductors, internal rotators

Lie on your back on a bed or a table



Bring your leg up and across your body as indicated. Stretch and externally rotate your thigh for 1-2 minutes. Repeat on the other side.

**Notes**