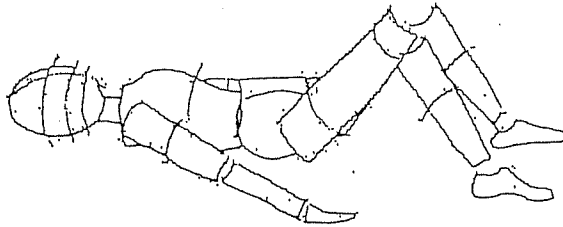


These exercises are used with permission of SARA MEEKS PHYSICAL THERAPY, 501-F N.W. 23<sup>rd</sup> Avenue, Gainesville, Florida 32609. 1-888-330-7272.

## DECOMPRESSION EXERCISE



\*If head tilts back (chin is tilted upward,) support the HEAD by placing folded towels or pillows under the HEAD:

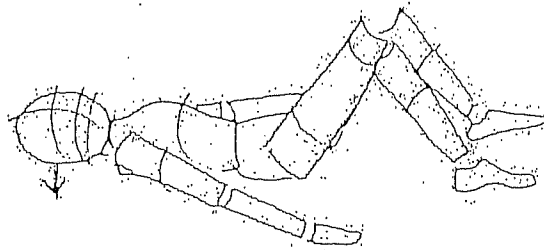
If head tilts down (chin is towards the chest,) support the NECK with a towel roll or other support.

Some persons will need BOTH the head and neck supported.

\*\*Usually hook-lying position (as shown in picture) is sufficient bend in knees; however, sometimes 90/90 position should be used to start the program.

Benefits: 1. Takes compression off vertebral bodies (front of backbone ;)  
2. Increases tolerance for lying on the back; 3. Helps relieve back pain

## HEAD PRESS



Lie on back as in Decompression Exercise (# 1). There are three variations to this exercise. Do the one that is checked for you.

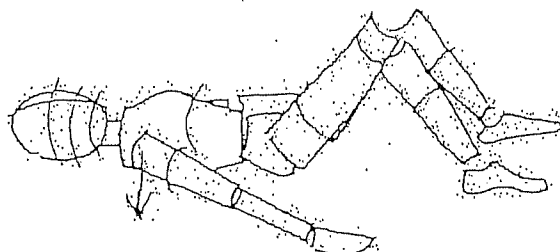
\_\_\_\_\_ Variation A: Head tilted with chin facing upward (cervical extension.) Tuck chin SLIGHTLY towards chest. Feel lengthening on back of neck. Feel weight on back of head. Press head downward into supporting surface.

\_\_\_\_\_ Variation B: Head that is tilted with chin facing downward towards chest (cervical flexion.) Tilt chin SLIGHTLY upward. Feel weight on back of head. Press head downward into supporting surface.

\_\_\_\_\_ Variation C: Head and neck in neutral. Hold chin in position. Feel weight on back of head. Press head downward into supporting surface.  
Hold: \_\_\_\_\_ Relax. Repeat: \_\_\_\_\_

Benefits: 1. Strengthens the neck extensors; 2. Helps promote a more neutral cervical spine.

## SHOULDER PRESS



Lie on back as in Decompression Exercise (# 1). Press backs of shoulders downward towards supporting surface. \*

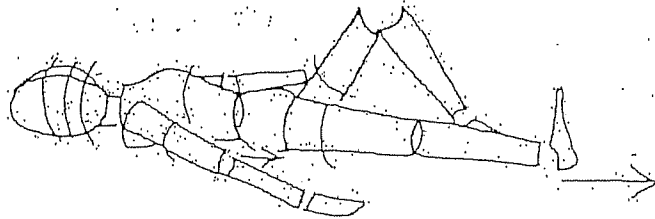
Hold: \_\_\_\_\_ Relax. Repeat: \_\_\_\_\_

\_\_\_\_\_ If you are unable to do this movement with both shoulders at the same time, do one shoulder at a time and work up to being able to do both at the same time.

\_\_\_\_\_ If you are unable to do one shoulder at a time, you may need to lie in the Decompression Exercise position for a few minutes each day until the muscles on the front of your chest loosen up and you can press one or both shoulders downward.

Benefits: 1. Strengthens scapular retractors and mid-upper back extensors.  
2. Stretches the pectoral and other anterior shoulder muscles.

## LEG LENGTHENER



Lie on back as in Decompression Exercise (#-1). Straighten one leg down to the supporting surface. Keep leg in alignment (do not rotate or slide it outward); knee cap should face directly up towards ceiling, leg in alignment with hip. With knee as straight as you can get it, pull toes AND forefoot towards knee, extend the heel and "lengthen" the calf.

\_\_\_\_\_ Variation 1: Lengthen the leg by pulling the pelvis away from the rib cage.

\_\_\_\_\_ Variation 2: Lengthen the leg by imagining that you are pressing the bottom of your foot into a plaster-of-paris wall; such that you could make a mold of your foot on the wall.

Hold: \_\_\_\_\_ . Relax. Repeat: \_\_\_\_\_

Do in sets of: \_\_\_\_\_ . Each leg: \_\_\_\_\_

Benefits: 1. Stretches the hip flexors, quadratus lumborum, hamstrings (primarily at insertion,) and gastrocnemius muscles.

DO'S AND DON'TS

AVOID and/or MINIMIZE POSITIONS OF FORWARD BENDING (FLEXION),

SIDE BENDING AND ROTATION OF THE TRUNK

(ESPECIALLY WHEN MOVEMENTS OCCUR TOGETHER)

DON'T: Bend over to tie your shoes or put on socks.

\*\*\*\*\*

DO: Bring one foot up, cross it over the opposite knee and bend forward (hinge) at the hips to do the task. (Keep your back straight.) If you cannot do this safely, then you need to use long handled assistive devices such as a shoe horn and sock puller.

DON'T: Do exercises in the gym that bring you forward (abdominal crunches, sit-ups, touching your toes, knee-to-chest straight leg raising.)

\*\*\*\*\*

DO: Exercises that emphasize return to normal body alignment and strengthening of the muscles that keep your back straight, as outlined in this program or by your therapist.

DON'T: Bend from the waist to pick something up off the floor, out of the trunk of your car, or to brush your teeth, wash your face, etc.

DO: Bend at the knees, keeping back straight as possible. Use a reacher if necessary

**DON'T:** Reach unnecessarily or twist your trunk when mopping, sweeping, vacuuming, raking, making beds, weeding gardens, getting objects out of cupboards, etc.

**DO:** Keep broom, mop, vacuum, rake close to you and move your whole body as you move them. Walk over to the area on which you are working. Arrange kitchen, bathroom, bedroom shelves so that frequently used items may be reached without excessive bending, twisting and reaching. Use a sturdy stool if necessary.

**DON'T:** Sit down when your back aches.

**DO:** Lie down on your back with a small pillow under your head and one under your knees; or as outlined by your therapist. Or, lie in the 90/90 position—on the floor with your feet and legs on the sofa with knees and hips bent to 90°.

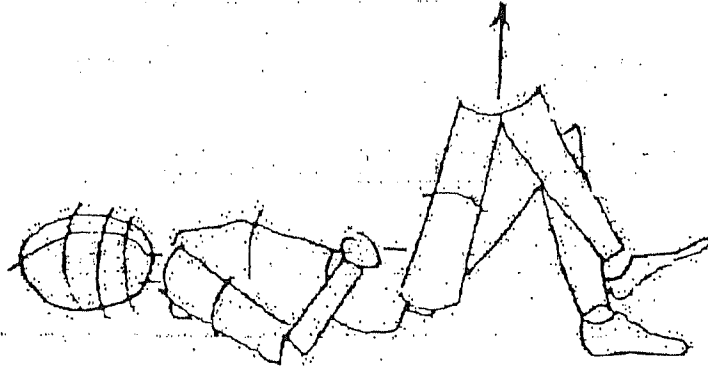
**DON'T:** Engage in ballistic types of exercise routines, such as high-impact aerobics or jumping rope

**DO:** Follow a regular exercise program that includes a variety of different weight-bearing activities, such as low-impact aerobics or walking, as your Physical Therapist advises.

### REMEMBER

PREVENTION of fracture is the so-called "BOTTOM-LINE" in the management of OSTEOPOROSIS. Do not take unnecessary chances in movement. Once a compression fracture occurs, the process is very difficult to control; one fracture is frequently followed by many more.

## ABDOMINAL STRENGTHENING



Lie on your back, knees bent, feet flat on floor. Palpate prominent front hip bones (ASIS) with your fingers, then slide fingers about 1/2 -1 inch towards the midline of your body. Tighten your lower abdominal muscles by pressing your navel toward the front of the backbone.....you may feel your gluteal muscles and pelvic floor muscles tighten also. **DO NOT DO A PELVIC TILT.**

Hold the position of your pelvis with your tightened lower abdominal muscles as you do:

1. Slowly slide the heel of one foot away from your buttocks until the leg is straight. Hold momentarily and return heel to start. Repeat on other leg.
2. Keeping your knee BENT, pick one foot up and down off the floor 5-8X.
3. Repeat #1 with other foot.
4. Alternately pick up each foot up and down off the floor 5-8X.
5. Pick up one foot and hold it in the air (at approximately a 90/90 position of the hip and knee. As you hold your leg there, pick the other foot up and down off the floor 5-8X.
6. Repeat #4 with other leg.
7. Pick up one foot and hold it in the air. Then pick up other foot and make bicycle movements with that second leg. Make small circles and then larger ones. "Cycle" in both directions.
8. Repeat #6 on other side.
9. Pick up one foot and hold it in the air. Pick up other foot next to it. Then bicycle both legs, first in one direction and then the other. Remember that a bicycle motion is a circle. You can also, however, do stair-steppers and other leg movements with this one.

**REMEMBER:** During all leg movement, the pelvis remains STATIONARY. MONITOR THE MOVEMENT WITH YOUR FINGERTIPS. DO NOT ADVANCE the exercise UNTIL YOU CAN CONTROL THE PELVIC MOVEMENT.