THE

RE-ALIGNMENT ROUTINE

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Initial Exercises of

The MEEKS METHOD®

for POSTURAL IMPROVEMENT and/or MAINTENANCE and THE MANAGEMENT OF BONE HEALTH

Not all you can do but a good, and S.A.F.E.,* place to start.

*Skeletally Appropriate For Everyone

March 2021

RE-ALIGNMENT ROUTINE

DECOMPRESSION EXERCISE



Supine lying. On your back. Lie on your back on the firmest surface you can tolerate. Bend hips and knees and place feet on Foot Triangles of Support (heels, outer border, and balls of feet – no weight on toes). Turn arms (including the shoulder joints) upward and slide arms out from the sides of your body about 45 degrees – arms half way between shoulders and sides of body with palms and inner arms facing upward. A. position above

Your head should not tilt forward or back—have someone look at you from the side to ascertain that your head and neck are as neutral as possible.

- If your head tends to tilt back, support your HEAD with a folded towel or small pillow. Less is More--do not over-support—use as much as you need but as little as possible.
- If your head tilts forward (chin towards chest), support your NECK with a rolled-up small towel or even a washcloth. Again, Less is More but use as much as you need to. You may need both supports and a physical therapist can help you with this.

Your shoulders should be **SLIGHTLY** higher than your elbows. If your shoulders are quite noticeably above your elbows—support your **ELBOWS** and lower arm with folded towels or pillows.

DO NOT place support under shoulders. Again, Less is More.

Imagine a Plumb (straight) Line running down inside your bones from your shoulder joint and exiting through the tip of your middle finger. Lengthen your arms along this line. Begin with one arm at a time and then, as you learn the movement, you can do both arms together.

This exercise can be done in bed or even in a recliner chair—support your back with a folded blanket so as to have a firmer surface. If you have any questions, please consult with a therapist trained in THE MEEKS METHOD®.

This position should be relaxing and comfortable.

Allow your breath to be natural and just let it happen however it happens. The idea is to relax and allow your back to re-align in this gravity-neutral position. Once you are comfortable, practice breathing through your nose, keeping your mouth closed.

NO READING, TV, CATS, DOGS, KIDS, LIFTING WEIGHTS, CELL PHONES, TEXTING OR TWEETING Soft music can be good for relaxation.

If you have back pain in this position, you may need to get into the 90/90 position. **B. position above**. Lie on the floor (or the firmest surface you can tolerate) with your hips and knees each bent to a 90^o angle and supported on pillows, a sofa or chair. Alternatively, place a bolster or pillow under your knees. You should be in a position where you eliminate your back pain without bringing your knees up to your chest.

BENEFITS: (1) Takes compression off vertebral bodies; (2) Imparts a tensile (lengthening) force on the spine and within the vertebrae; (3) Increases tolerance for lying on your back; (4) Allows for rehydration of the intervertebral discs; and (5) Helps relieve back pain.

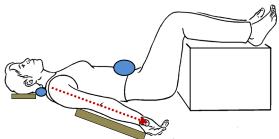
If this position does not relieve back pain and/or causes *more* pain (it does happen,) then I would suggest you see a physical therapist trained in The Meeks Method[®] for further instruction.

THIS IS THE "SINGLE BEST EXERCISE FOR MOST BACK PAIN" Not all you can do but a good start

After you can do the previous exercise well, you can move on to this one too. Alternate doing each one as they are different.

RELAXATION-BREATHING-DIAPHRAGM STRENGTHENING-POSTURAL CORRECTION ALL-IN-ONE

Before you do this exercise, stand in front of a full-length mirror and check out your posture – what you see and how you feel.



- 1. Find a time when you can relax with no distractions.
- 2. Lie in 90/90 position with legs supported as above. Legs can be spread apart and rotated slightly outward to allow for relaxation of the pelvic floor. Or, depending on comfort level, have legs closer together.
- 3. Turn arms (including rotating shoulders outward) upward and slide arms out from the sides of your body about 45 degrees half way between shoulders and sides of body; lengthen arms through Internal Plumb Line of the arm from shoulders down to middle finger. Place a small book, a cell phone, or a 2 lb weight (a 2 lb bag of rice would work well but the smaller and more specific the weight is best) on your abdomen at or just *below* navel level
- 4. Support your head and/or neck (but not your shoulders) with a small pillow and/or neck roll as little as possible but as much as you need—same as in Decompression Exercise.
- 5. Support arms so as to relieve any pull on your neck and front of your shoulders; alternatively, use small pillows for support in your armpit and under your elbows and place your hands across your body—this helps to relax your neck. (#2 position above is preferable; however, you should be completely relaxed for this exercise. You should feel comfortable and not "forced" with your body supports
- 6. Make sure you are warm enough
- 7. Allow your eyes to close. Place an eye pillow over your eyes if you like.
- 8. Begin to focus on your breath. At first, practice being aware of your breath-how do you breathe? Through your nose? Mouth? Is your breath *Shallow or Deep*? What is the *rate* of your breath? If you notice you are breathing with your mouth, see if you can close your mouth and breathe through your nose. If this is difficult, keep trying and it will become easier.
- 9. Then, begin to press the abdominal weight upward as you breathe IN and bring it downward as you breathe OUT. Keep focusing on the site-specificity of your breath as you press the weight up and release the weight down. When your mind wanders, gently bring it back to moving the weight. With each breath OUT, consciously relax your body a bit more
- 10. Do this for 5-15 minutes. Try not to fall asleep but, if you do, don't feel guilty about it—rest until you are ready to get up.
- 11. When you get up, take a moment to check yourself in the mirror as you did before.

This position should be relaxing and comfortable. The idea is to allow your body and back to relax and re-align in this gravity-neutral position as you focus on your breath.

BENEFITS: (1) Takes compression off vertebral bodies; (2) Induces a tensile (lengthening) force on the spine and within the vertebrae; (3) Increases tolerance for lying on your back; (4) Allows for rehydration of the intervertebral discs; (5) Helps relieve back pain; (6) Strengthens the diaphragm; and (7) Can impart a feeling of deep relaxation.

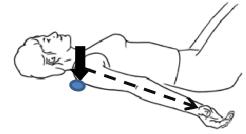
THIS IS ANOTHER GOOD EXERCISE FOR MOST BACK PAIN

RE-ALIGNMENT ROUTINE

CHEST OPENER/COLLARBONE LENGTHENER SHOULDER PRESS with IMAGINARY SPONGE SQUEEZE

A MEEKS-METHOD ORIGINAL--UPDATED FOR MORE SPECIFIC STRETCHING OF THE ANTERIOR CHEST AND STRENGTHENING OF THE BACK EXTENSORS¹





Lie on your back as in Decompression Exercise, arms about ½ way between shoulders and hips, with palms turned up, hips and knees bent with feet resting on Foot Triangle of Support (heels, outer borders, and balls of feet)

- Identify your Sternal Notch (located in the center of your chest between your collar bones and indicated by the red diamond above). Trace your collarbones out and up to the tops of the shoulder joint (indicated by the solid white arrows above.) Visualize your pectoral muscles (indicated by the dashed white arrows) beginning at the center chest at your sternum (breastbone) (indicated by the orange rectangle () and running out to your shoulders.
 - Take a breath in and, as you breathe *out*, begin the movement at the center of your chest and "lengthen" your pectoral muscles and collarbones in the direction of the white arrows in the picture above.
 - Notice how, as you lengthen the front of your chest, your shoulders begin to move downward towards the supporting surface. As you reach the end of the lengthening movement, pretend you have sponges filled with water under the tips of your shoulders.
 - Actively press down with your shoulders and squeeze the water out of the sponges.
 - Hold this Shoulder Press 2-3 seconds.
 - 4 Then, relax the movement & allow the water to fill the sponges again as you breathe IN.
 - Always breathe *IN* on the relaxation and *OUT* with the effort. Do *NOT* hold your breath.
 - Repeat 3, 5 or 8 times making sure you can perform the exercise with good form.
 - Work up to a 4-6 second hold or more if you like and can hold the position and breathe in and out evenly as you hold.
 - NOTE—If you are unable to press both shoulders at the same time, do one shoulder at a time. If you do one shoulder at a time, do not roll your body to the side to press the shoulder down.

Benefits: 1. Stretches the muscles on the front of the chest

2. Strengthens the mid-upper back extensors

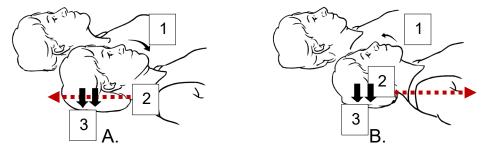
3. Can be used with other Meeks Method Re-Alignment Exercises

AWARENESS—Do **NOT** attempt to squeeze shoulder blades (scapulae) together. They will come together but do not try to bring them together. This exercise is meant to target the back extensors and not the scapular retractors. Strength of the back extensors has been shown in research to minimize the risk of compression fractures in people with osteoporosis.¹

This exercise will also strengthen your scapular stabilizers for better shoulder joint movement.

¹ Sinaki M and Itoi 2002 (an "oldie but goodie")

HEAD PRESS



Lie on back as in Decompression Exercise. There are three variations to this exercise. Initial position of cervical spine (back of the neck) is critical to success. Palpate the back of your neck to be sure you have an arch in the cervical spine. Have someone look at you from the side to help you ascertain that you are in neutral alignment. *And, the initial position you decide upon may change as your alignment changes....even in one session.*

INITIAL HEAD POSITIONING BEFORE PRESS—refer to above diagrams

____Variation A: If your chin is tilted upward—cervical spine is in hyper-extension (more arched than it should be)

- Tuck chin <u>SLIGHTLY</u> towards chest. (1) Feel lengthening on back of neck, <u>or</u>
- Pull upward
 on base of skull (chin comes down but focus is on pulling posterior (back of) skull upward). (2)

_Variation B: If your chin is tilted downward--cervical spine is in flexion (rounded.)

- Tilt chin <u>SLIGHTLY</u> upwards-away from chest.(1) Feel lengthening on back of neck, <u>or</u>
- Pull downward
 on base of skull (chin comes up but focus is on pulling posterior skull downward) (2)
- ____Variation C: Head and neck in neutral. Hold chin in position or do Variation A above to ensure stability of position before press.

After your head is positioned in neutral alignment *(back of neck arched),* feel weight on the back of your head.

Without moving your chin, press head downward onto supporting surface.(3) Hold 2-3 seconds. Relax. Work up to 4-6 second hold. Repeat 3, 5, or 8 times.

Benefits: 1. Strengthens the deep cervical (neck) muscles which hold your head up against the force of gravity; 2. Helps promote a more neutral cervical spine; 3. Can be used with other Meeks Method Re-Alignment Exercises.

NOTE: Sometimes the positioning of your head can be related to areas of restriction and or weakness further down the body. Be sure to do the other exercises in this routine if you want to affect your head positioning more permanently. And....you may need to seek out personal care for head positioning.

RE-ALIGNMENT ROUTINE



LIE ON YOUR BACK AS IN DECOMPRESSION EXERCISE

- Straighten one leg down to the supporting surface by sliding your *heel* away from your buttocks. Focusing on and controlling the movement of the heel results in an isotonic (active shortening) contraction of the quadriceps and an eccentric (lengthening) contraction of the hamstrings thus increasing stability of the knee joint and relieving (or preventing) pain in patients who otherwise have knee pain during this movement.
- Make sure leg is in alignment with the hip—leg not abducted (out to the side) or rotated (external -- outward) rotation of the hip is quite common in this movement)
- Visualize a paintbrush between your 2nd and 3rd toes pointing straight up towards the ceiling—this helps to keep leg in neutral alignment. Also, keep kneecap pointed towards ceiling.
- Adjust position of foot by dorsi-flexing the ankle--focus on movement of the heel—pressing the heel out as the toes move upward.
- Take a breath IN and, as you breathe OUT, press the BACK OF YOUR THIGH FOCUSING ON THE AREA BETWEEN HIP AND KNEE straight downward, as if to make an impression of this part of your leg in the supporting surface. Do **NOT** dig your heel into the supporting surface as this results in a contraction of the hamstrings at the posterior (back of) knee (knee flexion) and is not correct. If needed, place a folded blanket under your legs between your hips and knees so that you have something to press against.
- Hold 2-3 seconds. Work up to 4-6 seconds. Release. Repeat 1X.
- o Re-bend knee and then do press with other leg.
- Then, maintaining core stability (tightening of abdominal muscles (*without* flattening the lower back or doing a pelvic tilt), straighten both legs down to supporting surface (one at a time), squeeze legs together in groin area and press both legs (between hips and knees) downward at the same time.
- Same hold times as with single leg.

WATCH FOR COMMON COMPENSATORY MOVEMENT

Increased Lumbar Lordosis (arching of lower back)

Flexion of Cervical Spine—Keep chin slightly up so that cervical flexion does not occur

BENEFITS

- Strengthens the Hip Extensors, Quadriceps, and Ankle Dorsiflexors—some of the main muscles for getting up out of a chair, going up and down stairs and walking.
- Stretches the hip flexors (muscles on the front of the hip), insertion of the hamstrings and origin of the gastrocnemius (muscles on the back of the knee), and the large calf muscle on the back of the lower leg.

PLEASE NOTE

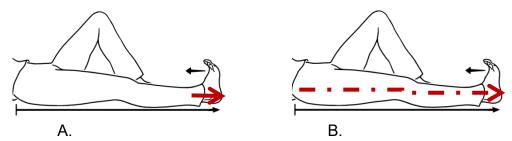
It is usually a good idea to learn and do this exercise before attempting the next exercise--The Leg Lengthener. This is in line with The Meeks Method principle of STABILITY BEFORE FLEXIBILITY

and the reference.*

^{*}Blatters et al "Neurological Management of Osteoporotic Vertebral Body Fractures…" Global Spine Journal 2018, Vol 8(2S) 505-555.

LEG LENGTHENER

A MEEKS-METHOD ORIGINAL--UPDATED FOR MORE SPECIFIC STRETCHING OF THE HIP FLEXORS, POSTERIOR KNEE AND ANKLE PLANTAR FLEXORS



LIE ON YOUR BACK AS IN DECOMPRESSION EXERCISE

- Straighten one leg down to the supporting surface by sliding your heel away from your buttocks. Focusing on the movement of the heel results in an isotonic contraction of the quadriceps and an eccentric contraction of the hamstrings thus increasing stability of the knee joint and relieving or preventing pain in people who otherwise have knee pain during this movement.
- Make sure leg is in alignment with the hip—leg not abducted (slid out to the side) or outward rotated (external rotation of the hip is quite common in this movement).
- Adjust position of foot by dorsi-flexing the ankle--focus on movement of the heel—pressing the heel out to cause the toes to move upward toward the knee.
- Visualize a paintbrush between your 2nd and 3rd toes pointing straight up towards the ceiling—this helps to keep leg in neutral alignment.
- Take a breath IN and, as you breathe OUT, lengthen your leg by pulling your pelvis away from your ribs.
- Hold 2-3 seconds. Release. Repeat 1X
- o Bring leg back to starting position and then do on exercise with other leg. Work up to 6-8 second hold.

WATCH FOR COMMON COMPENSATORY MOVEMENT

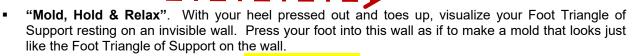
Increased Lumbar Lordosis (arching of lower back)—Stabilize by tightening abdominal muscles.

Hip Hiking on Opposite Side—Same stabilization as above

Flexion of Cervical Spine—Keep chin slightly up so that cervical flexion does not occur.

VARIATIONS OF THIS EXERCISE

Imagine an Internal Plumb Line running down inside your leg from your hip joint, down through the central part of the femur, between the tibia and fibula in the lower leg and exiting out the sole of the foot at a point just in front of the heel, Lengthen your leg along and around this internal plumb line. Note how this brings the movement more into the leg itself.



CAUTION

This movement usually causes a pull on the spine and can cause increased compression with consequent pain in someone with an acute compression fracture. Stabilize to avoid spinal movement.

Or learn and do the LEG PRESS first and develop stability before doing the Leg Lengthener.

Please do not hesitate to contact me with any questions on these exercises. jharrison2@earthlink.net