DISCOVER YOUR POSTURAL CORE!

OPTIMAL SPINE HEALTH
THROUGH
ALIGNED MOVEMENT TRAINING

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DEDICATION

To Sara Meeks, PT, MS, GCS, KYT
who inspires, educates, collaborates, and
is a generous mentor to Marcia and thousands of others

All likeness, similarity, and replication of pictures or names of movements
are used by permission of Sara Meeks, PT, MS, GCS, KYT (THE MEEKS METHOD)

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* If a task has once begun, never leave it ’til it’s done. *
* Be it great or be it small, do it well or not at all. *
* -Unknown *

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Welcome to **Optimal Spine Health through Aligned Movement Training**. This unique approach is based on **THE MEEKS METHOD** and **Dynamic Postural Unloading**. It is designed to improve your spine and core strength, balance, posture, control of body movement, and overall health.

**EXPERIENCE** 3 STEPS to build a stronger back and better posture!

1. **UNLOAD** and take the weight off of your spine  
2. **REALIGN** your body for effective training  
3. **STRENGTHEN** your core and deep posture muscles

A specific and easy to implement approach:

• **Develop** a stronger body with optimal alignment  
• **Improve** your balance, agility, and body mechanics  
• **Learn** a specific program you can practice on your own  
• **Implement** aligned movement training for everyday activities

**HOW POSTURE AFFECTS YOUR SPINE HEALTH**

**POSTURE** is one of the most visible signs of spinal deformity and compromised spine **integrity***, which is often associated with pain, stiffness, weakness, and imbalance. Postural problems have been shown to significantly affect overall health due to the physical, psychosocial, and economic consequences.

Changes in posture affect spine health by altering the relative orientation of body structures.\(^1\),\(^17\)

This program specifically focuses on eliminating the problems associated with this condition, which include:

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These common problems influence how the entire body operates in space, as well as the ability to control movement. Therefore, the precise manner in which you sit, stand and move could affect your spine health.\(^1\)  
\(\star\) **Integrity**: The state of being unimpaired; soundness
MAY THE FORCE BE WITH YOU: UNLOAD!

This method applies evidence-based research that demonstrates the benefits of spinal **UNLOADING:** removing or decreasing potentially harmful forces or compression from the front of the vertebrae. Load or force comes from gravity, muscles, body position, and movement. Too much or too little load can damage the vertebrae; however, just the right amount and type can improve vertebral integrity.

The foundation of this approach is based on optimal spinal **UNLOADING.** This can be achieved with posture alignment, body position, specific muscle training, control of movement, and body mechanics. This program integrates these components to improve spine and overall health.

1. **Posture Alignment** When the body is in an optimal, lengthened position it can potentially reduce harmful forces from gravity, muscle, body position, or movement that could otherwise damage the vertebrae. Improved postural alignment may strengthen the spine and improve health.

2. **Body Position** Lying on your back, side, or stomach are positions that can reduce the force of gravity on the spine. Spinal UNloading may be achieved with **Dynamic Seated or Dynamic Standing Alignment.**

3. **Specific Muscle Training** The core and deep postural muscles of the **ENTIRE** spine (from head to tailbone) are designed to move the body, while keeping it upright and stable.

4. **Control of Movement** The central nervous system controls body speed, direction, and level of movement. Reducing spinal forces for safer loading can improve the body’s ability to move with optimal control.

5. **Body Mechanics** Techniques used to move the body for daily activities, exercise, work, and recreation can either damage the spine or improve its integrity. When the body is effectively trained with optimal alignment, it can properly **UNLOAD** with all movement to promote a healthier spine.
BODY POSITION AND MOVEMENT: WHICH ONES ARE BEST FOR YOUR BACK?

Posture, body position, movement, and type of exercise affect the health of your spine depending on the amount, direction, and location of the force placed onto it. The FRONT of the spine (vertebral body) is soft, spongy and more frequently damaged than the BACK of the spine, which is hard, firm, and stronger.

Bottom Line: UNLOAD the front of the vertebral body!

![Diagram showing forces on the spine](image)

Nachemson et al. 1966

**Healthier Forces**
Dynamic Seated Alignment
Standing/Seated Hip Hinge
Standing Single Hip Hinge
Single Kneeling Hinge
Dynamic Seated Alignment

**Common Activity or Body Position**
Driving (car seat), Dining (common chair)
Picking up or putting on shoes/socks
Picking up groceries, Laundry
Gardening, Cleaning
Computer work

**Harmful Forces**
Seated, knees higher than hips
Seated, bending forward
Standing, bending forward
Standing, bending forward
Seated, legs level with hips

Position your body in
DYNAMIC STANDING* OR DYNAMIC SEATED ALIGNMENT**
and move with Hinge Technique* to reduce the load or force on the front of vertebrae.

(page 6*, page 7**, page 25*)

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THE BENEFITS OF UNLOADED BACKWARD BENDING EXERCISE

Effective exercises for the spine are different from loaded (weight bearing) exercises for the arms and legs. Research demonstrates that specific muscle training for the back performed in an UNLOADED position (e.g. lying on stomach, side, or back) can improve spine integrity and decrease the chance of damage and/or fracture.\(^{19}\)

The benefits of UNLOADING the front of the spine with backward bending exercise demonstrates the potential to improve spine integrity AT ANY AGE.

**UNLOADED BACKWARD BENDING EXERCISES CAN REBUILD THE VERTEBRAE!**

These exercises can:
- Improve posture alignment and lengthen the body
- Unload the front of the spine and improve the shape of the vertebrae
- Improve vertebral strength and decrease the chance of spine fractures

**FORWARD BENDING EXERCISES CAN DAMAGE THE VERTEBRAE!**

These exercises can:
- Cause a curved, compressed spine
- Overload the front of the spine and cause the vertebrae to fracture
- Alter the shape of the spine due to abnormal force onto the vertebrae

Research has shown that 89% of people had vertebral fractures with forward bending exercises\(^{\text{Sinaki et al. 1984}}\)

THE BENEFITS OF A LENGTHENED ALIGNMENT

- Look better and feel great!
- Eliminate neck and back pain
- Strengthen postural core muscles
- Improve balance and movement
- Expand breathing and lung capacity
- Minimize force onto front of spine where damage usually occurs
- Improve the shape of your spine
- Develop better spine integrity

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GETTING STARTED

A LIFETIME OF PRACTICE

This program is designed to be practiced throughout a lifetime. It can improve your postural core, body alignment, balance, body mechanics, and ultimately help you to achieve optimal spine integrity and overall health and well-being. The first step is to start.

- **THINK**: Think about it often.
- **ACT**: Take action and practice.
- **PLAN**: Designate specific days of the week or certain times of the day to practice.
- **PRACTICE**: Perfect practice will result in your own optimal health.

KEY POINTS

- **ALIGNMENT, ALIGNMENT, ALIGNMENT**! Achieve your own optimal alignment. Train your body to move within this aligned position. Each exercise or movement has a specific Optimal Alignment.
- **KEY** Optimal Alignment positions are the following:
  - Dynamic Standing Alignment  
  - Dynamic Seated Alignment  
  - Standing & Seated Realignment Positions

BE SAFE: LISTEN TO YOUR BODY!

- **New to the program?** Keep **EFFORT** and **STRAIN** below 50%
- Slowly increase **EFFORT** and **STRAIN** in 10% increments. Listen to your body!

EFFORT:

1. Mental or physical energy that is exerted to achieve a purpose  
2. Attempt to do something that involves considerable energy

STRAIN:

1. To make a great physical or mental effort in order to do something  
2. A pulling or stretching force

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DYNAMIC STANDING ALIGNMENT

KEY POINTS OF ANATOMY

- Base of Head
- Back of Neck
- X-Bone
- Belly Button
- Pelvic Headlights
- Pubic Bone
- Foot Triangle
- Balls of Feet
- Outer Border
- Center of Heels

INcorrect

Foot Triangle

THE 5-STEP HOLD

1. Foot Triangle
   - Feet parallel and aligned with Pelvic Headlights
   - Press into floor with Foot Triangle:
     o Center of Heel, Outer Border, and Balls of Feet

2. Align Pelvis
   - Place one hand at lower back, palm facing away
   - Place index finger of other hand at Pubic Bone
   - Rotate Pubic Bone up, feel lower back flatten
   - Rotate Pubic Bone down, feel lower back curve
   - Optimal position will be a slight curve in lower back and
     Pubic Bone tipped down slightly

3. Belly In
   - Position palm of hand on abdomen (as shown above)
     o Use pinky fingertip and draw Belly Button in toward spine to stabilize pelvis and lower back

4. X-Bone Up
   - Place thumb under base of sternum and lift X-Bone to raise the
     chest and lengthen the upper back

5. Head Lift
   - Align neck
     o Place index fingertips at Base of Head just behind the ears
     o Lift Base of Head from behind ears and lengthen Back of Neck
     o Keep nose level, relax jaw

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DYNAMIC SEATED ALIGNMENT

KEY POINTS OF ANATOMY

**THE 5-STEP HOLD**

1. **Foot Triangle**
   - Feet parallel and aligned with **Pelvic Headlights**, knees lower than hips
   - Press into floor with **Foot Triangle**
     - Center of Heel, Outer Border, and Balls of Feet

2. **Align Pelvis**
   - Place one hand at lower back, palm facing away
   - Place index finger of other hand at **Pubic Bone**
   - Rotate **Pubic Bone** down until there is a slight curve in the lower back and you are seated equally on both legs at **Hip Joint**

3. **Belly In**
   - Position palm of hand on abdomen (as shown above)
     - Use pinky fingertip and draw **Belly Button** in toward spine to stabilize pelvis and lower back

4. **X-Bone Up**
   - Place thumb under base of sternum and lift **X-Bone** to raise the chest and lengthen the upper back

5. **Head Lift**
   - Align neck
     - Place index fingertips at **Base of Head** just behind the ears
     - Lift **Base of Head** from behind ears and lengthen **Back of Neck**
     - Keep nose level, relax jaw
STANDING REALIGNMENT POSITION

Begin with THE 5-STEP HOLD


THE TECHNIQUE

- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Align arms with side of body, approximately 10-12 inches away
- Palms facing forward, elbows and fingers lengthened

OPTIMAL REALIGNMENT POSITION

FOOT TRIANGLE

INCORRECT

Head forward Nose up

1. Foot Triangle
2. Align Pelvis
3. Belly In
4. X-Bone Up
5. Head Lift

THE TECHNIQUE

- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Align arms with side of body, approximately 10-12 inches away
- Palms facing forward, elbows and fingers lengthened
1. BREATHING
- Standing Realignment Position with THE 5-STEP HOLD (page 8)
- Initiate breathing from the diaphragm at lower abdomen
- Continue breath by expanding from lower to upper ribs towards chest
- Expand abdomen and ribs with inhalation
- Draw belly in toward front of spine with exhalation
- Relax jaw

2. SHOULDER SLIDE
- Standing Realignment Position with THE 5-STEP HOLD (page 8)
- Slowly slide shoulder blades together to activate only upper back and shoulder muscles
- Hold 5-10 counts, 2 times
- Breathe, relax jaw
THE TECHNIQUE

- Standing Realignment Position with THE 5-STEP HOLD (page 8)
- Slide specified foot back slightly
- Straighten knee, press heel to floor to lengthen leg
- Lengthen leg, pull hip and pelvis away from spine
- Raise specified arm(s) alongside head, palm forward
- Lengthen specified arm, elbow, and fingers, pull shoulder, ribs and chest away from pelvis
- Feel the spine lengthen, HOLD 5-10 counts
- Breathe, relax jaw

THE SEQUENCE

1. SAME SIDE ARM AND LEG
   - Lengthen right arm, right leg, HOLD
   - Repeat same movement with left leg and left arm

2. OPPOSITE ARM AND LEG
   - Lengthen right arm, left leg, HOLD
   - Repeat same movement with left arm and right leg

3. BOTH ARMS/ BOTH LEGS
   - Press both feet to floor
   - Raise both arms alongside head palms facing forward, straighten both knees
   - Lengthen both arms and legs at the same time, HOLD

4. COMBINATION
   - Keep both arms raised and slide foot back according to colored arrows
   - Follow sequence below for arm/leg position
   - Lengthen according to colored arrows
     - Left arm/Left leg
     - Right arm/Right leg
     - Left arm/Right leg
     - Right arm/Left leg
STANDING REALIGNMENT ROUTINE
THE PRESSES AGAINST A WALL OR DOOR

Begin with THE 5-STEP HOLD


THE TECHNIQUE

- Standing Realignment Position with THE 5-STEP HOLD (page 8)
- Position heels against wall
- Straighten knees, PRESS specified heel to wall, HOLD
- Raise and lengthen arm alongside head, palm facing forward
- PRESS to wall with back of hand, fingers, wrist and shoulder, hold 5-10 counts
- Breathe, relax jaw

THE SEQUENCE:

1. SAME SIDE ARM AND LEG
- Shift body alignment onto left Foot Triangle, straighten legs
- Raise right arm, lengthen and PRESS right arm and leg, HOLD
- Repeat same sequence with left arm and left leg

2. OPPOSITE ARM AND LEG
- Shift body alignment onto right Foot Triangle, straighten legs
- Raise right arm, lengthen and PRESS, right arm and left leg, HOLD
- Repeat same sequence with left arm and right leg

3. BOTH ARMS/BOTH LEGS
- Straighten both legs, raise both arms
- Follow THE COMBINATION press sequence (left) for arm/leg position
- Lengthen, PRESS arm and leg according to colored arrows, HOLD
- Repeat for each combination

4. ARM PRESSES
- 3 Arm Positions:
  1. Airplane
  2. 90/90
  3. “V”
- Lenghten both arms away from body to Position 1
- PRESS into wall with fingers, back of hand, wrist, shoulder
- Repeat PRESS for all three positions

THE COMBINATION
Follow the colored arrows
- Left arm/Left leg
- Right arm/Right leg
- Left arm/Right leg
- Right arm/Left leg
- Both arms/Both legs

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SEATED REALIGNMENT POSITION

Begin with THE 5-STEP HOLD


THE TECHNIQUE

- Dynamic Seated Alignment with THE 5-STEP HOLD (page 7)
- Align arms with side of body, approximately 10-12 inches away
- Palms facing forward, elbows and fingers lengthened

1. Foot Triangle

COMMON INCORRECT SEAT HEIGHT

- Knees level with hips
- Knees higher than hips

OPTIMAL SEATED REALIGNMENT POSITION

- Knees lower than hips
1. BREATHING
- **Seated Realignment Position with THE 5-STEP HOLD** *(page 12)*
- Initiate breathing from the **diaphragm** at lower abdomen
- Continue breath by expanding from lower to upper ribs towards chest
- Expand abdomen and ribs with inhalation
- Draw belly in toward front of spine with exhalation
- Relax jaw

2. SHOULDER SLIDE
- **Seated Realignment Position with THE 5-STEP HOLD** *(page 12)*
- Slowly slide shoulder blades together to activate only upper back and shoulder muscles
- Hold 5-10 counts, 2 times
- Breathe, relax jaw
SEATED REALIGNMENT ROUTINE: THE LENGTHENERS

Begin with THE 5-STEP HOLD


THE TECHNIQUE

- Seated Realignment Position with THE 5-STEP HOLD (page 12)
- PRESS into floor with designated Foot Triangle, HOLD
- Raise arm alongside head, palm facing forward
- Lengthen arm, elbow, and fingers upward
- Pull shoulder, ribs and chest away from pelvis to feel the spine lengthen, HOLD 5-10 counts
- Breathe, relax jaw

THE SEQUENCE:

1. SAME SIDE ARM AND LEG
   - Press into floor with left Foot Triangle, raise left arm alongside head palm forward
   - Lengthen, HOLD
   - Repeat same movement with right foot and right arm

2. OPPOSITE ARM AND LEG
   - Press into floor with right Foot Triangle, raise left arm alongside head palm forward
   - Lengthen, HOLD
   - Repeat same movement with left foot and right arm

3. BOTH ARMS/BOTH LEGS
   - Press into floor with both feet, raise both arms alongside head, palms forward
   - Follow THE COMBINATION press sequence (left) for specific arm/leg position
   - Lengthen arm and press foot according to colored arrows, HOLD
   - Repeat for each combination

4. ARM LENGTHENERS
   - 3 Arm Positions:
     1. Airplane
     2. 90/90
     3. "V"
   - Lengthen both arms away from body to Position 1, HOLD
   - Repeat LENGTHENER for all three positions

THE COMBINATION

Follow the colored arrows
- Left arm/Left leg
- Right arm/Right leg
- Left arm/Right leg
- Right arm/Left leg
- Both arms/Both legs
POSTURAL CORE TRAINING
OPTIMAL STARTING ALIGNMENT

Begin with THE 5-STEP HOLD

1. **Foot Triangle**
   - Press to floor with center of heel, outer border, and balls of feet

2. **Align Pelvis**
   - Imagine a cushion at abdomen to maintain stable pelvis and lower back

3. **Belly In**
   - Draw belly button inward toward spine

4. **X-Bone Up**
   - Lift X-bone to lengthen upper back

5. **Head Lift**
   - Lift head from top of ears to lengthen the back of the neck

---

1. **Foot Triangle**
2. **Align Pelvis**
3. **Belly In**
4. **X-Bone Up**
5. **Head Lift**

---

**POSTURAL CORE TRAINING**

**DIAGRAM KEY**

- **Cervical Core** (Step 5)
- Example of Targeted Muscle Area of Spinal Core
- **Abdominal Core** (Steps 2,3,4)
- **Base of Balance** (Step 1)
POSTURAL CORE TRAINING: LEVEL ONE


THE TECHNIQUE

• Standing Realignment Position with THE 5-STEP HOLD (page 8)
  ○ Activate Base of Balance (Step 1)
  ○ Activate Abdominal Core (Steps 2,3,4)
  ○ Activate Cervical Core (Step 5)
• Place arms at instructed position, align with body
• Activate deep Spinal Core muscles:
  1) Move arms back 1/2” to 1” in specified position
  2) Slide shoulder blades together slightly toward colored area at center of spine
• Hold 2 counts each, arm repeats 5-20 times
• Breathe, relax jaw

1. Realignment Position
   Targets low thoracic and upper lumbar back muscles
   • Align arms with side of body
   • Hands 10-14 inches away from side of body, palms forward
   • Elbows and fingers lengthened

2. W
   Targets lower and mid thoracic back muscles
   • Align arms with side of body
   • Elbows bent, close to body
   • Palms forward

3. Airplane
   Targets mid thoracic back muscles
   • Align arms with side of body
   • Arms at shoulder height
   • Elbows and fingers lengthened
   • Palms forward
POSTURAL CORE TRAINING: LEVEL ONE (Continued)

Begin with THE 5-STEP HOLD


4. 90/90
Targets mid and upper thoracic back muscles

- Align arms with side of body
- Arms at shoulder height
- Fingers lengthened
- Elbows bent to 90°
- Palms forward

5. Row
Targets mid thoracic back muscles

- Align arms with side of body
- Arms at shoulder height
- Elbows bent and toward back
- Fingers lengthened, palms down

6. Arms Overhead (Single)
Targets mid and upper thoracic back muscles

- Align arms with side of body
- Lengthen and raise both arms
- Palms forward
- One arm repeats
- Switch arms

7. Arms Overhead (Double)
Targets mid and upper thoracic back muscles

- Align arms with side of body
- Lengthen and raise both arms
- Palms forward
- Both arm repeats
# Postural Core Training: Level Two

## Arm Repeats with Leg Lengthened

### Begin with THE 5-STEP HOLD

|------------------|----------------|-------------|--------------|---------|

### THE TECHNIQUE

- **Standing Realignment Position with THE 5-STEP HOLD** (page 8)
  - Place arm(s) at instructed position, align with body
  - Slide specified foot back slightly, lengthen leg
  - Press both feet into floor
  - Arm repeats, 5-30 times
  - Breathe, relax jaw
  - Switch leg positions

---

### 1. Realignment Position

Targets low thoracic and upper lumbar back muscles

- Align arms with side of body
- Hands at side 10-14” away from legs, palms forward
- Elbows and fingers lengthened

---

### 2. W

Targets low and mid thoracic back muscles

- Align arms with side of body
- Elbows bent, close to body
- Palms forward

---

### 3. Airplane

Targets mid thoracic back muscles

- Align arms with side of body
- Position arms at shoulder height
- Elbows and fingers lengthened
- Palms forward

---

### 4. 90/90

Targets mid and upper thoracic back muscles

- Align arms with side of body
- Arms at shoulder height
- Fingers lengthened
- Elbows bent to 90°
- Palms forward

---

### 5. Row

Targets mid thoracic back muscles

- Align arms with side of body
- Arms at shoulder height
- Elbows bent and towards back
- Fingers lengthened, palms down

---

### 6. Arms Overhead

Targets mid and upper thoracic back muscles

- Align arms with side of body
- Lengthen and raise both arms
- Single or both arm repeats
- Palms forward
POSTURAL CORE TRAINING: LEVEL THREE
COMBINATION ARM REPEATS

Begin with THE 5-STEP HOLD

1. Foot Triangle  
2. Align Pelvis  
3. Belly In  
4. X-Bone Up  
5. Head Lift

1. Arm Overhead with 90/90  
   - One arm overhead, palm forward  
   - Other arm at 90/90 position, palm forward

2. Airplane with 90/90  
   - One arm shoulder height, palm forward  
   - Other arm at 90/90 position, palm forward

3. Realignment with 90/90  
   - One arm 10”-12” from side of body, palm forward  
   - Other arm at 90/90 position, palm forward

4. Realignment with Airplane  
   - One arm 10”-12” from side of body, palm forward  
   - Other arm at shoulder height, palm forward

5. Realignment with Arm Overhead  
   - One arm 10”-12” from side of body, palm forward  
   - Other arm overhead, palm forward

6. Arm Overhead with Airplane  
   - One arm overhead, palm forward  
   - Other arm at airplane position, palm forward

7. Arm Overhead with W  
   - One arm overhead, palm forward  
   - Other arm at “W” position, palm forward

8. Arm Overhead with Row  
   - One arm overhead, palm forward, align with body  
   - Other arm at row position

9. Arm Overhead with Grasshopper  
   - One arm overhead, palm forward, align with body  
   - Other arm at grasshopper position
STANDING DEEP ABS AND CORE TRAINING

Begin with THE 5-STEP HOLD


THE TECHNIQUE
- Standing Realignment Position with THE 5-STEP HOLD (page 8)
- Hinge only at hip, maintain same knee and foot angle
- Repeat 5-20 times
- Breathe, relax jaw
- Stand alongside stable surface and hold with one hand, if necessary

THE SEQUENCE

A. Leg repeats with 3 arm positions
- Three arm positions:
  1. Realignment (12”-18” from side of body)
  2. Airplane (at shoulder height)
  3. V (hands 12”-18” from head)
- Raise one leg to 90°, foot pointing forward
- Lower and raise ONE LEG, hinge only at hip
- Alternate hip hinge movement with each arm position

B. Leg repeats with combination
- Position arms according to colored dots
  - Realignment  <->  Airplane
  - Realignment  <->  V
  - Airplane  <->  V
- Raise one leg to 90° or less, foot pointing forward
- Lower and raise ONE LEG, hinge only at hip
- Alternate hip hinge movement with each arm position
SEATED DEEP ABS AND CORE TRAINING

Begin with THE 5-STEP HOLD


THE TECHNIQUE

• Seated Realignment Position with THE 5-STEP HOLD (page 12)
• Hinge only at hip, maintain same knee and foot angle
• Repeat 5-20 times
• Breathe, relax jaw

THE SEQUENCE

A. Leg repeats with 3 arm positions

• Three arm positions:
  1.ⓞ Realignment (12”-18” from side of body)
  2. ・ Airplane (at shoulder height)
  3. ⚪ V (hands 12”-18” from head)

• Raise one leg to 90°, foot pointing forward
• Lower and raise ONE LEG, hinge only at hip
• Alternate hip hinge movement with each arm position

B. Leg repeats with combination

• Position arms according to colored dots
  Realignment Ⓩ <-> ・ Airplane
  Realignment Ⓩ <-> ⚪ V
  Airplane ・ <-> ⚪ V

• Raise one leg to 90° or less, foot pointing forward
• Lower and raise ONE LEG, hinge only at hip
• Alternate hip hinge movement with each arm position
WALL LENGTHENER WITH ARM LIFT

Begin with THE 5-STEP HOLD


THE TECHNIQUE

- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Place toes at or close to wall
- Position body close to, but not touching wall (avoid over-arching and straining the lower back)
- Place arms overhead onto surface
- Straighten elbows, lengthen fingers
- Press into floor with Foot Triangle
- Lengthen arm(s) with shoulder and upper back muscles
- Press X-bone toward wall, HOLD
- Maintain alignment with all arm lift repeats
- Breathe, relax jaw

1. SINGLE ARM LIFT
- Lift one arm away from wall to align with side of body, HOLD 2 counts
- Maintain lengthened arm
- Repeat arm lifts, 5-10 times
- Repeat same sequence with other arm

2. BOTH ARM LIFT
- Lift both arms away from wall to align with side of body, HOLD 2 counts
- Repeat arm lifts, 5-10 times

SPINE ALIGNER

THE TECHNIQUE

- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Interlace fingers behind body at tailbone, palms facing up
  1. Gently pull hands toward feet
  2. Press hand into glutes at base of tailbone or buttock, HOLD 10 counts
  3. Slide shoulder blades together slightly
- Feel upper back and head lift and lengthen
- Breathe, relax jaw
DYNAMIC BALANCE: THE “CONE OF ECONOMY”

Balance is a key requirement for efficient standing and function. Research suggests that optimal posture and standing balance can be viewed in a “Cone of Economy.”

To achieve efficient balance, the trunk of the body should be centered within the “Cone of Economy”. This is a narrow range between which a person can remain balanced without support.

As the trunk of a standing person moves toward the periphery of the cone, more effort is required to maintain balance. If the trunk extends in any direction beyond the cone, the person will fall over unless supported.

A standing person maintains a center of balance within a narrow range of sway relative to the feet. The body uses more energy when it is imbalanced, because it has to work harder to stay upright. This leads to fatigue, pain and can result in abnormal forces onto the spine.

FIND YOUR “CONE OF BALANCE”

THE TECHNIQUE
- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Hold each position 5 counts
- Breathe, relax jaw

THE SEQUENCE
Begin with Foot Triangle
Shift body in direction indicated
Press into floor with:
1st Balls of both feet
2nd Ball of left foot
3rd Outer border left heel
4th Center of left heel
5th Center of both heels
6th Center of right heel
7th Outer border right foot
8th Ball of right foot
Return to 1st position
Repeat in other direction
1. FORWARD LEG LIFT
- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Shift body weight onto left leg
- Press into floor with left Foot Triangle
- Extend right leg forward with heel
- Place right heel onto floor
- Dip Pubic Bone down slightly
- Keep foot forward and knee straight
- Lift right heel, hinge at hip, HOLD 2 counts
- Leg lift repeats, 10-20 times
- Breathe, relax jaw
- Repeat with other leg

2. SIDE LEG LIFT
- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Shift weight onto left leg
- Press into floor with left Foot Triangle
- Extend right leg to the side
- Place ball of right foot onto floor
- Dip Pubic Bone down slightly
- Keep foot forward and knee straight
- Lift right foot, hinge at hip, HOLD 2 counts
- Leg lift repeats, 10-20 times
- Breathe, relax jaw
- Repeat with other leg

3. BACKWARD LEG LIFT
- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Shift weight onto left leg
- Press into floor with left Foot Triangle
- Extend right leg back
- Place right ball of foot onto floor
- Dip Pubic Bone down slightly
- Keep foot forward and knee straight
- Lift right foot, hinge at hip, HOLD 2 counts
- Leg lift repeats, 10-20 times
- Breathe, relax jaw
- Repeat with other leg
HINGE MOVEMENT TECHNIQUE
(A.K.A. “DIP AND GO” WITH THE 5-STEP HOLD)

Begin with THE 5-STEP HOLD


THE TECHNIQUE
- Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
- Hinge Movement (“Dip & Go”):
  - Press into floor with Foot Triangle
  - Dip Pubic Bone down
  - Bend at hips, knees and ankles

OPTIMAL ALIGNMENT FOR SMOOTH WALKING

Dynamic Seated Alignment with THE 5-STEP HOLD (page 7)
Hinge Movement Technique “Dip & Go” (above)
Dynamic Standing Alignment with THE 5-STEP HOLD (page 6)
Dynamic Balance for Smooth Walking
1. Extend front leg, heel forward
2. Step and stride onto Foot Triangle
3. Raise back heel, lengthen leg, straighten knee
4. Raise toes off floor to swing leg forward
GUIDELINES FOR MOVEMENT AND FREE WEIGHS

Begin with THE 5-STEP HOLD


OPTIMAL: LESS FORCE ON FRONT OF SPINE

Position body in **Dynamic Standing*** or **Dynamic Seated Alignment** for all movement and weight training (page 6*, page 7**)

Common Free Weights
- Overhead press
- Shoulder flexion/deltoid (forward)
- Shoulder abduction/deltoid (to side)
- Biceps and Triceps
- Sit squat (with or without lunge position)
- Wall squat

Body Position
- Dynamic Standing or Seated Realignment
- Dynamic Standing or Seated Realignment
- Dynamic Standing or Seated Realignment
- Dynamic Standing or Seated Realignment
- Dynamic Standing Realignment
- Dynamic Standing Realignment

POTENTIALLY HARMFUL FORCE ON FRONT OF SPINE

The following movements can potentially damage the **FRONT** of the vertebrae when done in any combination of: **forward bending, trunk twisting and/or side bending**.

Common Exercise or Movement
- Both knees to chest
- Toe touches
- Hamstring stretch
- Knee extension
- Forward Bend

Abdominals: crunches, sit-ups, roll-ups/downs, abdominal machine

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REFERENCES


Marcia Tassinari, a physical therapist for the past 16 years, received her Masters in Physical Therapy from Western University of Health Sciences. Diagnosed with "Osteoporosis" in 2002, at the age of 37 years old, she devotes all of her work to solving the problems associated with compromised spine and disc integrity, spinal deformity, postural changes, Osteopenia, Osteoporosis and spine fractures. Marcia has completed Levels 1 and 2 of THE MEEKS METHOD Training. She is a frequent guest instructor at the University of St. Augustine and San Diego Community College. Her programs and classes are currently at The SHŪBA Studio in Solana Beach, Tassinari Physical Therapy in Pacific Beach, San Diego YMCA facilities, San Diego Continuing Education, Orange County, and Santa Fe, New Mexico. She is currently developing research through her foundation, Posture Biomechanics Foundation. Marcia and her husband own Tassinari Physical Therapy in San Diego, California.
Our Mission: To build stronger statures through research and education of effective movement training and optimal postural alignment, to eliminate disability related to processes of compromised spine and disc integrity, spinal deformity, Osteoporosis, Osteopenia, and spine fractures, and to improve the health and well-being of individuals.

Our Purpose:

To develop programs and techniques for effective exercise and movement training which optimally load the spine to build stronger statures and improve health

To apply this technology and technique to:
- perform clinical research
- demonstrate objective improvement in postural, neuromuscular and physiological factors
- eliminate disability related to processes of compromised spine and disc integrity and spinal deformity
- show evidence of improved health and well-being

To implement education and training programs using these proven techniques and bring this technology to the public through community outreach, collaboration and program expansion

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