

Pelvic Contour Width

Trochanters need to be supported/protected and the ischials need to be protected.



- Too wide**
- Trochanters not supported
 - Lateral instability
 - Ischials can bottom out
 - Common with bariatric and pediatric clients

Pelvic Contour Length

Buttocks should be supported while loading femurs for stability. Ischials need to be protected during activity.



- Too long**
- Ischials can slide forward into Posterior Pelvic Tilt
 - Inadequate femoral loading



- Too short**
- Ischial excursion not respected
 - Ischials press into anterior shelf causing potential skin integrity issues

Femoral Support Length

Femoral loading stabilizes the pelvis, positions the lower extremities, and redistributes pressure.



- Too long**
- Pulls the hips forward in the seat (sliding)
 - Inhibits function
 - Increase pressure behind knees



- Too short**
- Not enough surface contact area for loading
 - Ischials may have increased pressure
 - Lower extremities may not be optimally positioned

Pelvic Contour Depth

The buttocks should be supported while maintaining optimal hip angle. Correct height depends on difference in height between ischials and posterior aspect of femur.



- Too deep**
- Causes interference with hip angle
 - Femurs will not be loaded
 - May increase pressure at the ischials



- Too shallow**
- Femurs will not be loaded
 - Encourages sliding
 - May not provide optimal pressure reduction at the ischials

Pelvis and Lower Extremities Assessment Goals

- ✓ Lateral Stability
- ✓ Inferior/Forward- rearward stability
- ✓ Posterior stability
- ✓ Posterior-Lateral stability
- ✓ Maximize surface contact area
- ✓ Optimize immersion
- ✓ Decrease magnitude of pressure

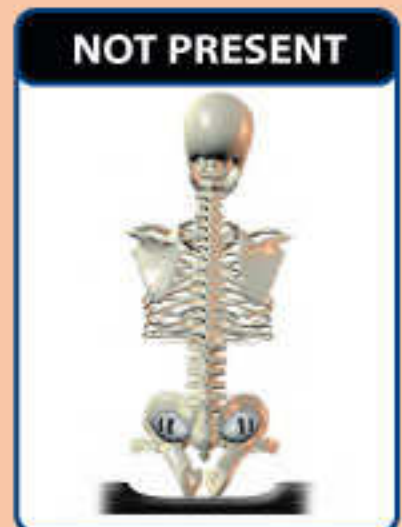


Pelvis and Spine Assessment Goals

- ✓ Posterior pelvic stability
- ✓ Posterior-lateral pelvic stability
- ✓ Lumbar support
- ✓ Posterior thoracic stability (▼T9)
- ✓ Posterior thoracic stability (▲T9)
- ✓ Lateral thoracic stability



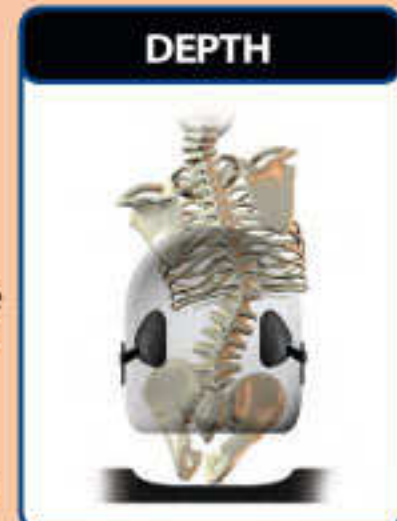
- NOT PRESENT**
- Posterior Pelvic/ Sacral Support**
- Not present**
- Pelvis will collapse into a posterior-rotated position
 - Flattening of the lumbar spine
 - Hips sliding forward



- NOT PRESENT**
- Posterior Lateral Pelvic Support**
- Not present**
- Pelvis and spine may become asymmetrical
 - Pelvis may collapse into a posteriorly rotated position
 - Flattening of the lumbar spine
 - Hips sliding forward

Lateral Thoracic Support

- Depth**
- Too shallow may not provide adequate lateral stability
 - Too deep may compromise function and/or cause injuries



Vertical placement range

- Consider the goal:
- Supporting the ribcage
 - Three point correction
 - Symmetrical support

Thoracic Support - Contour/Shape

Must facilitate optimal thoracic loading surface contact area.

- Too little may cause**
- Forward collapse of trunk
 - Lateral collapse of trunk
 - Incorrect head and neck position

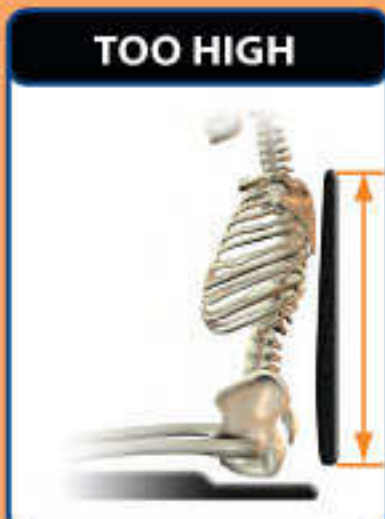
- Too much may**
- Inhibit function
 - Encourage collapsed trunk posture



Thoracic Support - Height

- Too Low**
- Lumbar spine not supported
 - Thoracic loading inadequate
 - Trunk collapses in client who does not have trunk control

- Too High**
- Function may be compromised
 - In absence of correct shape - may push pelvis and / or trunk forward



Lumbar Support Contour /Shape

- Too little**
- In the absence of posterior pelvic support lumbar area will not be supported and may collapse

- Too much**
- Pelvis rotates forward or rearward
 - Hips slide forward
 - Trunk falls forward: Compensation with extensor muscles may inhibit function

