Seating Shapes

PELVIS & LOWER EXTREMITIES

Pelvic Contour Width
Trochanters need to be supported/protected and the ischials need to be protected.

TOO WIDE

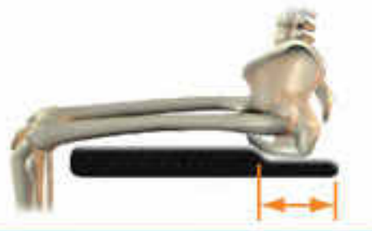
Too wide
- Trochanters not supported
- Lateral instability
- Ischials can bottom out
- Common with bariatric and pediatric clients

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

TOO LONG

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

TOO SHORT



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

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

TOO SHORT

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

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

TOO SHALLOW

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 & SPINE

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

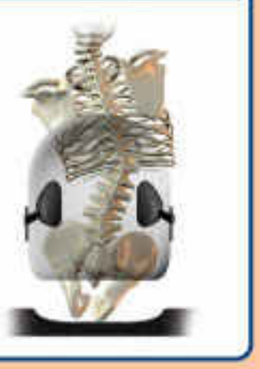
Posterior Lateral Pelvic Support

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

DEPTH



RANGE

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

TOO LITTLE

TOO MUCH

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*

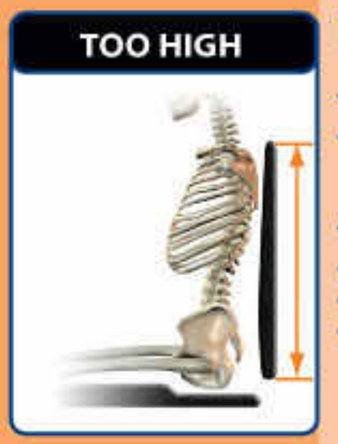
Thoracic Support - Height

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

TOO LOW

TOO HIGH



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

TOO LITTLE

TOO MUCH