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REFORMERING YOUR MAT - PAA WORKSHOP

INTERMEDIATE REFORMER MAT EXERCISES with MODIFICATIONS

Footwork

Purpose: centring, alignment, work the feet

Set up: Hands behind head as headpiece. Mimic foot positions, imagine the feet on the bar to keep level steady and work each foot position – balls, arches heels, articulating through foot and ankle

How does it change?: support is only on spine, no support at feet. Makes it more difficult to stabilise at T/L junction. Support at T/L is needed for illiopsoas muscle pull towards origin on L spine rather than towards insertion on femur (will shorten and create anterior pelvic tilt/L lordosis).

Tips: Match the load to stabilisation (i.e. legs higher if losing support at T/L); work the foot positions from the ankle as well as foot. Imagine a cradle for the upper T and C spine; hands are cradling head back, not pulling fwd.

Modifications: Legs higher, head support, less reps.

Hundreds

Purpose: circulation, improve breathing - improve postural and respiratory endurance of Diaphragm

Set up: as on mat but imaginary straps help to reach arms long and keep box/frame (shoulders broad and symmetrical).

How does it change: No straps to reach into. Support neck and shoulders by reaching head back into imaginary hammock/broadening through T3

Tips: 360 deg cylindrical breath, allow diaphragm to move. Lift/support head from T3/T4 (attach of DNF) rather than excessively flexing lower down T spine (t5/8 upper rectus area) which will restrict D movement. Extend the inhale to expand the breath.

Modifications: Legs higher or bent or down in hook lie. Head support.

Short Spine

Purpose: Massage and articulate spine, strengthen hips

Set up: Lie flat, arms by side knees into chest, feet together, knees shoulder width. Spine long, pelvis neutral, no tucking. Articulate spine and lift from hips. Support on shoulder blades in inversion phase, not neck.

How does it change: harder as no straps/resistance to assist in lifting the hips or articulating the spine.

Tips: Lift the legs from hips, do not throw them over. Work with your body weight to articulate spine, opening back /side ribs in the roll down. Work with equal/fluent curve in all spinal segments, avoiding excessive kyphosis. This requires equal distribution of IAP and balanced activity of all abdominals.

Modifications: Basic bridge

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Co-ordination

Purpose: co-ordination, breathing

Set up: as in hundreds but with elbow flexion and elbows on mat. Imaginary straps. **How does it change?:** no straps to reach into. Support neck and shoulders by broadening through T3, imaginary support at T3/back of skull.

Tips: 360 deg cylindrical breath, make sure the diaphragm can move. Lift head from T3/4 rather than excessively flexing around the upper rectus ab (which will restrict D). Extend the inhale to expand the breath.

Modifications: Legs higher.

Rowing 3-6 (Rowing is an advanced sequence and 1 and 2 are less accessible to most clients on the mat)

Purpose: Breathing. Isolated movement of shoulders, spinal elongation, strengthen upright posture

Set up: As on reformer. Sit tall off support at sitz bones, but do not grip glutes

How does it change?: No resistance, must work with imaginary resistance to allow the spine to elongate.

Tips: encourage isolated motion in shoulders to prevent compensatory movement in spine/head. Keep shoulder blades broad, maintaining good support through all points of spinal contact (imaginary) Good awareness at T3 (spine of scap) and back of skull will promote good shoulder girdle mechanics

Modification on the mat: Sit on pillow, pillow/roller under knees (tight hams)

<u>Swan</u>

Purpose: elongate/extend spine and hips.

Set up: As on mat, lie prone hands beside shoulders. 2 preps / neck rolls before the dive. Bring support to pubic bone or upper thighs before pressing up, allowing lumbar spine/illiopsoas to lengthen towards a point of support lower in body)

How does it change?: Harder to find extension at hip without foot support from barrel or reformer.

Tips: Maintain ribcage and pelvis as parallel as possible, correcting hyperextension of T/L junction/L spine. Fluent extension through all spinal segments. Remember hip extension as well as spinal.

Modifications: Adjust hand support to wider position or to forearms. Limit extension to T spine. Shift support from pubic bone to upper thigh to encourage more hip extension

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Pull Straps 1/2

Purpose: open chest and lungs, strengthen arms/shoulder girdle in isolated motion, improve extension/uprighting of T spine whilst stabilising L spine with deep core

Set up: 1) Arms in full flexion, slide along mat beside body to hips. 2) Arms abducted in T position, reaching arms away to open upper back/shoulders, pull to hips.

How does it change?: cannot reach arms down, so more difficult to maintain width across upper back and shoulders and humeral head in socket. Keep shoulders away from ears and humeral head moving back in glenoid cavity to encourage centration in joint and discourage protraction.

Tips: Keep ribcage and pelvis in good alignment, do not throw ribs forward to lift chest. Be aware of the 4 points of spinal contact in start position and elongate back of skull and tailbone away from each other. During the pulling, only the back of skull and upper T spine should lift up. Keeping the shoulder blades broad will help promote good ribcage position and good support for the deep neck flexors. Scapula depression must come from an upright T spine to engage mid/lower trap. Avoid excessive adduction of scap and elevation of ribs.

Backstroke

Purpose: co-ordination, strengthen upper body, expand the breath

Set up: As on reformer, fists above forehead, knees to chest with spine/pelvis neutral. Make sure head lifts from T spine. Up on 1, open 2 reach stretch 3; hold on 4/5 (expanding the inhale), home on 6.

How does it change?: No straps to reach into.

Tips: 360 deg cylindrical breath, make sure the diaphragm can move. Extend the inhale to expand the breath on the 3/4/5, make sure not holding the breath. Support neck and shoulders by broadening through T3, imaginary support at T3/back of skull **Modification:** Smaller range

<u>Teaser</u>

Purpose: Balance, control, deepen core, esp. lower trunk/pelvis, isolated shoulder movement. **Set up:** Supine, arms by sides at 45 deg (as on reformer), find the 4 points of spinal contact, lift head from T3/4 (DNF attach), then arms and finally legs.

How does it change?: Harder to upright the spine without straps/resistance Tips: Breathe into lower abs /pelvis to distribute IAP. It is not bearing down, rather a controlled expansion. Use the support off sitz bones to lengthen through back of legs in one direction and lengthen through spine in the other direction. Modification: Bent legs

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Short Box

Set up: Sit tall off sitz bones to start. Parallel relationship between ribcage and pelvis. **Purpose:** *Round:* Spine/pelvis articulation, mobility in stiff segments

Straight: Elongate spine, strengthen upright posture, balanced coactivation of all abs. *Side/Twist:* balanced co-activation of abs, esp. oblique chains (crossing the body), stretch/elongate Para spinals

Tree: stretch the whole back body, equalise the pelvis/control pelvic rotation, stretch the front of the hip (rolling back)

How does it change? Without box and strap, we increase flexion in hip and no support at feet. This makes it more difficult to balance hip musculature and stay connected to core. More difficult to equalise pelvis when there are asymmetries.

Tips: Isolate all movement from the hips. Femurs stay fixed as the pelvis (acetabulum) rotates around femoral head. This ensures that the pelvis moves with the spine and allows for balanced co-activation of all ab and hip musculature. Maintain fluent spinal curves in flexion, lateral flexion and rotation (axis remain parallel)

Modification: Reduce range, bent legs with flexion at hip knee ankle OR sit on a small box or pillow. Let client flex spine a little in tree. Leave out rolling back in tree.

Modified hug a tree – supine hamstring stretches with belt/strap.

Long Stretch

Purpose: Spinal /pelvic/shoulder girdle stabilisation ("one piece of steel from head to heel") with activation of all extremities in closed chain activity.

Set Up: In quadruped, centrate wrist elbow, shoulder, scap down and wide, bring ribcage to scap and scap to ribcage. Extend legs back one at a time to support on ball of foot, rock back and forth from heels. The glenoid cavities are rotating over humeral heads in closed chain motion.

How does it change?: For most people, the long stretch series is easier without resistance. The mat is a good place to practice centrated support through arms and shoulder girdle and pelvic control in movement. Also, good to create awareness of the closed chain pattern (i.e. glenoid cavity moving around humeral head, rather then the open chain pattern of head moving in cavity).

Modification: Use forearm support rather than hands.

Up Stretch/Down Stretch combo:

Purpose: <u>Up Stretch</u> - Work the hips, body awareness of spine/pelvic-shoulder girdles in motion, isolated movement. <u>Down Stretch</u> - open chest and shoulders; expand the breath, eccentric contraction of illiopsoas.

Set up:

1) Walk out to Long Stretch

2) Lift hips to move to up stretch, maintaining alignment through all 4 points of spine (on the diagonal), move forward and back to plank position, heels stay high

3) 4th rep, Add thoracic extension in plank position for down stretch. (2/3 reps)

How does it change?: See long stretch

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Modified Down stretch

Purpose: Same as Down Stretch, but very good option for clients with anterior pelvic tilt/excessive lumbar lordosis:

Set up: Start in quadruped (support on shins and hands) walk forward to neutral hip position and hold (no flexion in hip) – illiosposas eccentric contraction, trains dynamic pelvic control.

Elephant

Purpose:_strengthen the hips and elongate the back body

Set up: After the combo, walk the hands back to feet and lift lumbar spine/sacrum to ceiling. Hands and feet are shoulder width. Walk feet in and out between hands.

How does it change?: See long stretch

Tips: Lengthen back bottom ribs to sacrum, sacrum to tailbone, tailbone to heel. Lift lumbar spine towards ceiling to lengthen lower back.

Modification: Walk hands in and out. Very challenging on the back body, esp. those with tight hams/lower back. Avoid excessive T kyphosis, lift L spine to ceiling, bend knees when needed.

Stomach Massage

Purpose:

Round: Open lower back, massage internal organs

Straight (arms back): Lengthen lower back; extend T spine, open chest and shoulder s (this variation of SM is actually the first chest expansion exercise on the reformer)

Reach: Elongate spine and strengthen dynamic upright posture and lift out of hips (lower abs) Twist: Isolated thoracic rotation (with T uprighting)

Set up: *Round:* Sit to the back of sitz bones, feet together on floor, hips/knees semi flexed, hands on floor as on reformer (half way along thigh bone), spine is in long fluent flexion, reach head to wall in front, not floor. Lift legs and extend out and in from hip.

Straight: Take hands to back, open chest and shoulders.

Reach: arms reach front, allow spine to lean back a little and add *twist*, keeping hips square. **How does it change?:** Without the carriage/shoulder blocks to hold onto and footbar for feet, the exercise becomes much more challenging to keep the spine forward and maintain functional length through illiopsoas, just like the footwork presents a challenge to spinal stabilisation, SM is even more so, as it is upright.

Tips: Activate more balanced abdominal activity by breathing 360 deg around the T/L junction and sacrum (lower/and posterior lateral abs), keep legs higher and lower reps.

Modification: Legs bent, feet down/together, knees hip width, support on sitz bones *Round:* hands as on reformer SM (halfway along thigh bone on floor). Reach Spine forward from support on sitz bones (reach head to wall not floor)

Straight: (arms back) – hands on floor behind/straighten and bend elbows to open chest/shoulders. Spread pecs. Control alignment of ribcage, squeezing D down

Reach: Lean forward, reaching arms away on diagonal, spinal up-righting/elongation

Twist – isolate thoracic rotation from upright T spine

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Semi Circle

Purpose: Pelvic symmetry, open chest/extend T spine, open front of hip **Set up:** Supine with towel under back to slide. Hold ankles, heels together and knees shoulder width apart. Align ribcage/pelvis and articulate upper back to floor before sliding out, once out lift hips from glutes and slide/pull in 2x then reverse. Always focus on T articulation, chest broad, hip opening.

How does it change?: Stronger flexion in knee and requires good hip/shoulder mobility as hands holding ankles. May not be accessible to those with knee, hip, shoulder issues. Harder to control position of ribcage in restricted range.

Tips: Keep knees narrow (hip width) – do not escape through knees or ribs, focus on control and articulation. Keep shoulders and shoulder blades broad to enhance T spine position.

Modification: basic bridge with 10 sec holds for stretch - can do on a foam roller for spine/chest opening.

Chest Expansion CE/Thigh Stretch TS/Reverse Chest Expansion (arm springs AS)

Purpose: CE: Expand breath, chest exp (elongate pecs, open intercostal spaces) neck rotation, and isolated movement of shoulders/ neck. Upright spinal/pelvic stabilisation and control
TS: Open front of hip, elongate hip flexors, dynamic spinal/pelvic stabilisation and control
AS: Open chest and strengthen arms. Upright spinal/pelvic stabilisation and control
Isolated motion of shoulder.

Set up: Tall kneeling (adequate padding under knees) Arms flexed at shoulder height. Maintain alignment of ribcage and pelvis throughout, even when leaning back in TS. **How does it change?**: No support from carriage (can't hook feet on carriage) or straps. We can still work support through shins and dorsum of foot. Movement in TS needs to be smaller to control stability through pelvis and trunk. Use hand weights for resistance in CE. **Tips:** CE - imagine resistance to help create spinal elongation and chest opening. Keep the shoulder blades broad to upright though T3/T4 and make sure back of head in line with spine. Spread pecs at front and use breath to expand 360 degrees around ribcage and expand the chest musculature. Resist squeezing the shoulder blades together as often results in ribcage elevation. Focus on eccentric contraction of chest muscles (pecs, intercostals, SA) **Modification:** Reduce ROM

Leg Circles/Frog

Purpose: Symmetrical alignment, work the hips and legs, core control/spinal stabilisation **Set up:** As in footwork, spine/pelvis neutral, hands behind head, imaginary cradle for head and upper thoracic. Keep range small, especially circles. Maintain equal movement R/L, level pelvis.

How does it change?: Without support of straps, there is more challenge on spinal stabilisation, particularly at T/L junction and during leg circles (increased load). **Tips:** 360 degrees breathing through trunk and pelvis, particularly around T/L junction and lower pelvis. Can stabilisation sustain the load of legs? Do not let client cross their functional threshold (loss of support at T/L junction, illiopsoas muscle pull changes). Maintain pelvic symmetry as opposed to increasing range.

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Knee Stretches

Purpose: Control/stability through trunk and pelvis to allow isolated movement in hip. Strengthen core and stabilisers of hip/leg

Set up: Quadruped, use towels or paper plates under feet to slide. Lift knees and perform single, then double leg extension and flexion from hip. Maintain neutral/elongated spine. **How does it change?** Becomes harder to maintain symmetry in hips (no foot blocks). Particularly challenging to maintain neutral spine in double leg version without the resistance/return pull of springs

Tips: Focus on neutral position of spine and pelvis, keeping sitz bones reaching long as opposed to tucking under. Push floor away to encourage good support through arms, check centration of wrist/elbow/shoulder

Modification: Straight - quadruped with single leg extensions

Knees off - quadruped then lifting knees/heels off floor, hold position and perform double leg knee extensions, ankle still.

Running

Purpose: Cool down, alignment, return to centre.

Set up: Supine as in footwork. Hands behind head or pillow under head

Work the co-ordination and alignment while alternating flexion/extension at knee/ankle.

How does it change? Without bar, stabilisation of spine is more difficult, co-ordination of ankles/knees is challenging.

Tips: Focus on alignment, breath and stabilisation

Modification: Can be done standing

Pelvic Tilt

Purpose: Elongate lumbar spine, work buttocks and upper/ inner thighs **Set up:** Bridge with heels up/together, aBd/aDd hips.

How does it change?: Height of feet makes the elevation of pelvis more active then passive, requires more stabilisation.

Tips: Roll the spine up to elongate paraspinals. 360 degrees breath to activate core/hips, controlling height of pelvis so no hyperextension of L spine and promote eccentric contraction of iliopsoas.

Modification: Heels down.

Side Splits

Purpose: Upright posture, lift internal organs, leg strength and stretch.

Set up: Stand at one end of mat, feet together, good upright alignment. 3x stepping out and sliding in, last rep perform forward flexion (pick the flowers) / T spine rotation (saw), on alternate sides.

How does it change?: Stepping leg moves from closed to open chain and back to closed. Pay attention to dynamic alignment, esp. flexion in the stepping out knee – should be tracking over 2nd toe.

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Tips: Maintain good upright alignment of spine – parallel relationship of ribcage and pelvis. Work dynamically to pull legs together from centre. As on reformer, be careful that the return movement comes from the centre, not just the legs, to avoid pulling in groin/SI joint. **Modification:** Perform the forward bend only, beginning in straddle position, and then zigzagging feet back to centre to roll up.

Front Splits

Purpose: Builds stability, control and balance. Stretch hips and legs. Work the foot/ankle /knee/hip in support function (closed chain).

Set up:

- Lunge with hands on floor
- Standing upright lunge (offload arms)
- Kneeling lunge (upright illiopsoas stretch)

How does it change?: No alignment "props" from reformer, so requires more body awareness to keep hips/pelvis square. Because the front foot is flat on floor as opposed to on bar, we can work more on the centration of the whole foot in support function – spreading toes and activating longitudinal and transverse arches, whilst maintaining equal weight through outer inner heel, big toe and little toe. Back foot now has no support so requires good body awareness of ankle in P flexion.

Tips: Try to keep front thigh parallel to floor at all times. Externally rotate front hip without losing alignment of foot. Priority is symmetry and alignment, not range. Do not fully straighten the legs if it causes pelvic rotation. Watch that support remains on the ball of back foot, not toes. In the standing upright lunge, focus on hip extension in back leg, do not allow lumbar hyperextension. Do not hang in hip or L spine during the final stretch, rather, work the illiopsoas in eccentric contraction.

Modification: Choose only the parts that work for client, even just the kneeling lunge.