## **REEDUCATING AND REFORMING THE BODY THROUGH PILATES**

## AAHPERD Convention \* April 2013 \* Karen L. Smith • Washington College • ksmith2@washcoll.edu

Vanessa Williams and the San Francisco 49ers do it; so do Jodie Foster, Madonna, Oprah, Hugh Grant, Rod Stewart, Catherine Zeta Jones, and Jennifer Aniston. Pilates is also widely recognized and practiced by professional athletes, including golfers Tiger Woods, Ernie Els, and Anika Sorenstam. Used by athletes and dancers for over 80 years, Pilates is now one of the most popular exercise systems in the fitness industry, practiced by more than 10 million people. Pilates trains the body and mind to work for overall fitness, to build strength without bulking up, to reshape the body using precise movement and correct biomechanics, and to employ mental focus. It uses the deep muscles that protect the spine rather than the superficial muscles. Pilates improves "muscle recruitment" by teaching the body to use the right muscles to do the job - to recruit proper muscle firing patterns during exercise – as it trains the muscles to work effectively and efficiently. Pilates also affects the skeleton by bringing the bones back into their correct alignment, increasing stability, mobilizing joints, and enhancing movement patterns. By using the body correctly in proper alignment with sound muscle recruitment patterns, workouts increase their effectiveness and students eliminate the risk of injury during practice and performance. Pilates exercises produce a better quality and more efficient movement, training muscles to work in concert. It helps to lengthen and strengthen muscles while building a uniformly developed body, focusing on core strength using the abs, lower back, pelvic muscles, and buttocks so they become the control center from which movement originates. Using the core as the power center allows the body to move safely through flexibility, conditioning, and resistance activities; core stability allows the athlete to move with economy, grace, and balance. With the core as the center of power the body can move safely through stretching, conditioning, and resistance activities. Exercising via the Pilates method demands integration of breath, control, flexibility, strength, precision, focus, and body awareness. It also builds a uniformly developed and balanced body with improved alignment and stability. It is the perfect activity to train for an athletic event, tone and elongate muscles, or rehabilitate from an injury. Pilates requires both body and mind to train for overall fitness, to build strength without mass (bulk), and to use mental focus and precise movement for quality, not quantity, in order to produce the best results. Combining focused concentration on detail with conscious breathing connects mind and body. Every Pilates exercise uses the full-body, so that weaker and less-used muscles get a workout. The benefits of regular Pilates practice range from better posture, increased flexibility and range of motion, and improved concentration to strong abdominal, back, and gluteal muscles. With proper training, any motion becomes more efficient, from standing up to swinging a golf club or a tennis racket or executing a triple pirouette.

Joseph Pilates said about his method (he called it Controllogy): "In 10 sessions you will feel the difference... in 20 sessions, you will see the difference, and in 30 sessions, you will have a whole new body."

Exercise	Cue	Purpose	Tips
Imprinting	Lying in constructive rest (CR) position (knees bent, feet flat on floor) exhale to feel the pelvic floor and core abdominals curve the spine toward the floor. Gently pull the pelvic floor muscles (PFM) upward; hollow or scoop the belly (abs) toward the spine (but avoid tucking or tilting the pelvis). As the PFM is activated, the navel lifts up and in towards the spine, and the deep abdominal muscles brace the TVA. The lumbar spine will depress slightly to the floor. Feel the PFM (bladder control muscles/muscles between tailbone and pubic bone) gently pull up and in.	Helps stabilize trunk & spine using core muscles. Activates pelvic floor. Brings focus to center.	Avoid smashing your back to floor or tilting pelvis. Relax shoulders. Keep the spine, pelvis, & buttocks quiet and the hips, shoulders, and jaw relaxed. Think navel to spine, not spine to mat or floor.

All Pilates exercises use imprinting as the exercise is being practiced.

Exercise	Cue	Purpose	Tips
Hundreds	Lying on back, knee fold legs into table top	Improves circulation and	Pump vigorously but
	position (lower legs parallel to floor) – scoop	warms up the body in	w/o strain; arms move
	belly to spine as you curl head, shoulders, and	preparation for Pilates	from the back and neck
	upper spine off floor. Keep space between chin &	exercises. Improves breathing,	muscles keeping
	throat as though holding a lemon under chin. Lift	expands ribcage and lungs,	shoulders soft.
-	arms a few inches off floor reaching fingers and	strengthens core, lengthens	
	arms long. Pulse arms up and down a few inches	spine, focuses mind, stabilizes	Keep pelvis neutral.
	breathing in for 5 pulses and out for 5 pulses.	torso.	Breathe wide into your
	Legs may be straightened out to 45 degrees for		back and ribs. Keep abs
<b>Repetitions: 10 sets of</b>	more core emphasis. Focus eyes on belly.		scooped.
10			*

Roll Up	Lying with arms alongside body pressing into mat for stability, legs straight and "anchored" to floor – curl head, shoulders, and spine off floor slowly, keeping naval pulled to spine. Stretch forward over legs keeping ribs lifted over belly and belly lifted over thighs. Deepen ab contraction and slowly lower body, sequencing spine one vertebra at a time onto mat, lowering head after shoulders touch mat.	Works the powerhouse and stretches the hamstrings. Teaches how to articulate spine.	Keep movement fluid, slow, and smooth. Activate core and use breath to assist roll up and roll down. Squeeze legs together and keep them pressed into mat.
The Saw	Sitting tall with legs open slightly wider than shoulders, legs straight and 'glued' to the mat, arms outstretched shoulder height – inhale, engage abs, rotate torso to right. Exhale, reaching left arm toward baby toe of right foot as body curves forward, right arm reaching in opposition to high back diagonal. Inhale to rise. Bring torso back to centered original position.	Mobilizes hip joint while using only the joint, improves hamstring flexibility, and facilitates ease and economy of movement.	Keep both sitz bones in contact with the mat during the exercise. Keep shoulders down.
Single Leg Stretch	Lying on back, activate core, curve into 100s head and neck position as you fold one knee toward chest, place same side hand on ankle, opposite hand on knee, elbows wide. Extend other leg out to 45 degrees. Double pulse thigh to chest then switch legs (and hands).	Elongates spine. Stabilizes and strengthens core. Develops precision and coordination. Builds resilient hip muscles. Decompresses spine, hips, and shoulders.	Maintain stability of torso during the entire exercise. Shoulders are down and core is engaged throughout the exercise. Keep knees aligned and parallel.
Crisscross (oblique single leg stretch)	Lie on back with hands behind head, elbows wide, one leg folded toward the chest, one leg straight (as in single leg stretch), head, neck, and shoulders curled into 100s position. Rotate torso to bring the opposite elbow toward the folded knee. Reverse the movement by extending folded leg and folding straight knee into the chest as torso twists to bring opposite elbow toward the folded knee. Inhale on the transition and exhale as body twists toward knee. Look to back elbow to increase stretch.	Strengthens oblique abs. Stretches lats. Strengthens muscles that stabilize shoulder blades.	Make the movement occur from the oblique abs; keep pelvic muscles lifted and body anchored to mat as though stuck in cement. Avoid pulling on the neck or head. Feel the twist, and hold the oblique position before switching. Don't rush.
Teaser Prep   Image: Constraint of the second secon	Lying on back, knees bent, arms reaching past ears, extend one leg so thighs are parallel and glued together. Exhale and slowly lift head and torso off mat reaching fingers toward extended foot, keeping space between ears and shoulders. Roll spine down to mat returning arms overhead.	Works powerhouse and stabilizes lower body. Improves balance and coordination.	Feel the body "float" up as though pulled by a magnet. Sequence the vertebrae on the roll up and down, creating space between each vertebra.

## Questions to ask as you exercise:

Do you overuse the muscles at the front of the thighs?Can you stabilize the pelvis as your legs move in space?Is your powerhouse working rather than your hip flexors?Do shoulders and neck feel stretched — or stressed?Is one part of your spine more flexible than another?Are your movements flowing — or jerky?Do you remember to activate pelvic floor, or are you "letting it all hang out"?Is your breathing coordinated?

This brief summary is not a substitute for training with a qualified Pilates instructor; the best way to learn Pilates correctly is to find a certified instructor.

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## RESOURCES

For additional information and help, consult the following organizations and publications:

Balanced Body Pilates 8220 Ferguson Ave, Sacramento, CA 95828800.745.2837Peak Pilates 5555 Central Ave., Suite 200, Boulder, CO 80301800.925-3674, <www.peakpilates.com>Pilates Method Alliance 2631 Lincoln Ave., Miami, FL 33133866.573.4945.<www.pilatesmethodalliance.org>Stott Pilates 2200 Yonge St., #1402, Toronto, ON Canada, M4S 2C6416.482.4050<www.stottpilates.com>Physical Mind Institute 84 Wooster St., #405, NY, NY 10012800.505.1990<www.the-method.com>

Alpers, Amy Taylor and Rachel Taylor Segal. *The Everything Pilates Book*, Avon, MA: Adams Media Corporation, 2002 Gallagher, Sean P. and Romana Kryzanowska. *The Pilates Method of Body Conditioning*, Philadelphia: BainBridgeBooks, 1999

Isacowitz, Rael. *Pilates: Your complete guide to mat work and apparatus exercises*, Champaign: Human Kinetics, 2006 Pilates, Joseph H. *Your Health and Return to Life through Contrology* (Sean P. Gallagher & R. Kryzanowska, ed) Phila: BainBridgeBooks, 2000

Siler, Brooke. *The Pilates Body*, NY: Broadway Books, 2000 *Pilates Style Magazine* – www.pilatesstyle.com

or look for a Pilates Studio near you.