Whether you're training for a specific sport or activity, or simply trying to be better at the "game of life," you'll get a significant edge from 3D core training. No one said you have to play fair.

By Bob Andersen • Edited by Amanda Altman

WHY DO YOU TRAIN THE WAY YOU TRAIN? For most of us, it's because of the way we were taught, both through formal instruction and our experiences on the job. As a trainer for nearly 25 years and a Pilates instructor for 18, my focus has been primarily with athletes, from professional and Olympic competitors to middle school kids who just want to have fun. Naturally, this has had a profound impact on how I teach.

One thing professional instructors understand is that athletes perform dynamic movements, and that their training should reflect that. It might seem obvious, but too often I see athletes doing crunch after crunch after crunch. This type of training doesn't focus on the entire core—nor is it dynamic. What's more effective is core training that incorporates a variety of movements in all three planes while focusing on stability and control, which is known as threedimensional (3D) core training. It transfers well to the field or court, and will most certainly help improve performance.

Although these exercises are designed with the athletic client in mind, they're great for anyone. I work with my fair share of clients who are simply training for the game of life. Depending on the needs and ability of the student at hand, modifications can be made by simply changing the tempo, the range of motion or resistance. The goal is to safely challenge the client and have them

If you're an instructor, I'd encourage you to try these exercises for yourself. Then use your professional creativity to discover how you can incorporate one, two or all of them into your client's training. PS

GENERAL GUIDELINES

- **PROPS** Props are used to add challenge to a baseline exercise. Medicine balls and resistance tubing increase the strength challenge, while cushion and balance pads work balance and core stabilization.
- **BREATH** Breathe naturally, using the breath to enhance the movement quality.
- **REPS** Varies based on the goals of the workout, specific exercise, timing of the work and the individual. Generally, we do 1-3 sets, unless otherwise indicated.

- Everything we do, we do for a reason (and that reason is never "because I said so"). Focusing on why we're doing something promotes intention and mindfulness in the training session.
- Focus on quality over quantity.
- Start slow and with control, and when appropriate increase the tempo for more challenge.
- Do this workout once or twice each week, in addition to doing other variations on other days. Because this series isn't too long, it can be used as part of a warm-up, in the middle or at the end of a workout

Merrithew[™] Medicine Ball, 4 pounds; Stability Cushion, Large; Balance Pad, Large; and Strength Tubing™, Core, Regular **Strength** (\$49.99, \$45, \$69.99 and \$18.99,





SEATED TWIST WITH STABILITY CUSHION AND MED BALL

THE WHY Improving control of the hips as the upper body rotates helps with transfer of power and increasing understanding of upper- and lower-body dissociation.

START Sit on the front half of the cushion with your knees bent hip-width apart and feet flat on the floor. Roll back until your shoulders are behind your hips. Hold the ball in front of your navel.

MOVE Rotate your shoulders to one side, reaching the ball toward the floor; return to center. Repeat on your other side. Do 5-15 reps on each side.

TIPS The movement should come from the rotation of your torso; you're not just reaching with your arms. Keep your feet grounded throughout.

MODIFICATION Place a ball or bolster between your knees to increase the connection to your lower extremities.

ADVANCED Roll back further, or increase the tempo.



KNEELING TUBING CHOP

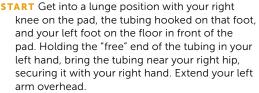
THE WHY To incorporate hip movement, as well as core movement through multiple planes, which will help with the overhead strike or throwing.

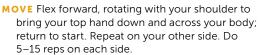
START Get into a lunge position with your right and your left foot on the floor in front of the pad. Holding the "free" end of the tubing in your left hand, bring the tubing near your right hip,

return to start. Repeat on your other side. Do

TIPS Let your hand holding the tubing near your hip slide to allow the tubing to stretch from your back foot to the reaching hand. The hand near your hip is simply meant to keep the tubing from sliding off your shoulder and finding a shorter route from your foot to your hand.

ADVANCED Increase the resistance on the tubing and/or the range of motion.





MODIFICATION Decrease the range of motion.



THE WHY Depending on how you perform squats, they can help improve mobility, core stability, strength and/or power. This exercise puts the emphasis on core stability as well as local muscular strength and endurance (holding the low position), improving the ability to get low, stay low and to be strong in that position.

START From a standing position, lower into a squat (ideally until your thighs are parallel to the floor) while holding the ball in front of your chest with your arms extended.

MOVE Reach the ball to one side, keeping your shoulders and hips square without shifting your body; return your arm to center. Repeat on your other side. Return the ball to center and return to vertical. Do 4-20 reps, starting with the reach on your opposite side each time.

MODIFICATION The depth of the squat can be modified to accommodate a wider range of abilities, as well as improving stability and local muscular strength and endurance at different levels.

TIPS In the squat position, your shoulders, knees and toes should all be in alignment. Try this exercise with your gaze straight ahead as well as with your gaze following the ball.

ADVANCED Increase the weight of the ball.







START 1.2

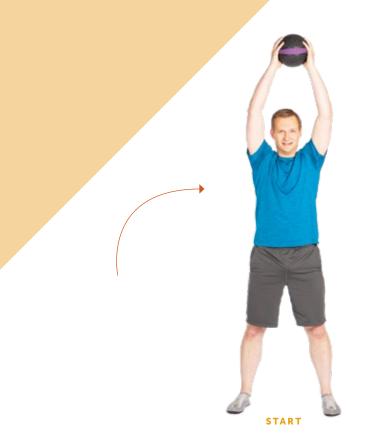


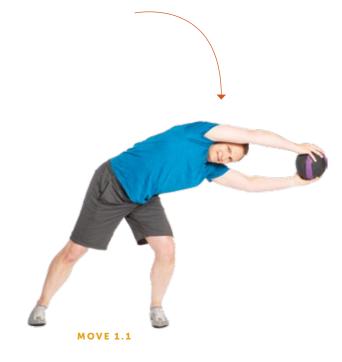
MOVE 1.1

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MOVE 1.3

MOVE 1.2

BIG CIRCLES WITH MED BALL

THE WHY By improving strength and stability of the core in a lengthened position, we can better protect the spine from injury as well as create a more efficient transfer of force through the core.

START Stand with your feet wide and slightly turned out, slightly bend your knees, and then reach the ball overhead.

ball as far from your center as possible, move it in an arc as if you're sweeping around the numbers of a clock, like a second hand: As the ball approaches the 3 o'clock position, shift your weight to reach it as far as possible, and then sweep it along the ground, from one foot to

the other. Shift your

weight and reach

MOVE Keeping the

the ball as far in the 9 o'clock direction as possible, and then complete the circle by reaching the ball high overhead. Reverse the direction. Do 4-16 reps.

TIPS Make the circle smooth, controlled and as big as (safely) possible. Shift your weight as far as you can balance in each direction. Try this exercise with your

gaze straight ahead as well as with your gaze following the ball.

MODIFICATION

Decrease the size of the circles. ADVANCED Increase the weight of the ball.

DIAGONAL WOODCHOPPER

THE WHY Performing this exercise at a fast tempo challenges you to continually push the speed while fighting for control, which improves core stability through quick and dynamic movements.

START Stand with your feet wide and turned out, and your knees slightly bent. Hold the ball outside and below one knee, with your shoulders toward the ball. Allow your weight to shift primarily to that leg.

MOVE Raise the ball high overhead while rotating your shoulders to face the opposite direction and shifting your weight to your other leg; the ball should finish above your head and outside your base of support. Return to start. Do 5-15 reps on both sides.

MODIFICATION Begin with a small range of motion, performing the movement slowly. **ADVANCED** Increase the tempo and range of motion.







MOVE

REVERSE LUNGE AND TWIST CHOP

THE WHY Adding coordination challenges to an exercise helps improve body awareness and control. In this specific exercise, we are training the core through a lengthened position while adding a coordination challenge.

START Stand tall with your feet slightly apart. Reach your arms high overhead while holding the ball.

MOVE Perform a reverse lunge, placing most of your weight on your front leg as you lower the ball near the floor on the outside of your front leg; return to start. Repeat on other side. Do 5-10 reps.

MODIFICATION Decrease your tempo and range of motion.

ADVANCED Increase the tempo and/or resistance Walking lunges can be performed instead of reverse lunges.



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LOW-TO-HIGH TWIST WITH TUBING

THE WHY To train the ability to generate force from the ground, and transfer it smoothly and efficiently through the core to the upper body. This is beneficial for improving overhead strength and stability for lifting, reaching, throwing and/or striking.

start Stand on the tubing with your right foot, placing your left foot behind the tubing. Hold onto the right handle with both hands below knee level, rotating your torso and shifting your weight to that side.

MOVE Rotate your shoulders, swinging your hands in an arc while pulling the handle high overhead; finish with your hands outside your stance on your other side. Return to start. Do 5–15 reps on both sides.

TIPS Adjust your positioning on the tubing to ensure a full range of motion. The tubing may need slack at the bottom in order to get a full range of motion through the top of the exercise.

MODIFICATION

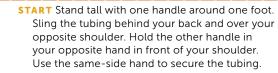
Anchor the tubing to a fixed point on or near the floor.

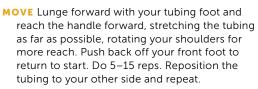
ADVANCED Increase the tempo and/or resistance.



FORWARD LUNGE AND PRESS WITH TUBING

THE WHY To apply a few different challenges such as coordination, balance, level change, upperbody strength and stability, and core stability through a lengthened position. This application of multiple challenges is more complex, and more closely mimics sport-specific and real-life challenges. It requires you to manage all of the challenges simultaneously.









START

MOVE



Coach BOB ANDERSEN is a Merrithew lead instructor trainer specializing in CORE Athletic Conditioning and Performance Training. He has developed strength and conditioning programs for all fitness levels—from aspiring youth to Olympic and professional athletes. Currently his primary focus is working with other instructors, both novice and seasoned, helping them to improve their ability to integrate athletic training into their clients' training, as well as expanding into training more athletes.

Although Bob is a certified Strength and Conditioning Specialist (CSCS) through the National Strength and Conditioning Association (NSCA), he understands that fitness is about so much more than strength; it's really about performance. All athletes—field and court, individual and team, speed and power, dance and stage—share one thing in common, the need to perform at their best to succeed. What drives his training is the need to consistently and safely, and

sometimes dramatically, improve performance. Bob believes that everything we do, we do for a reason—and that reason should always answer the question, will it help improve performance?

Bob holds degrees in exercise science as well as psychology, and received a doctorate from the University of Nebraska Medical Center. He recognizes that performance comes in many forms, and his training gives clients what they want (improved performance) while also providing them with what they need (the means to improve safely and consistently). His coaching is client-focused, intentional and goes beyond conventional fitness training. He understands that intelligent exercise leads to profound results, and is continually working to bridge the gap between science and application. For more information, visit coachbobandersen.com; follow Coach Bob on Facebook (/coachbobandersen) and Instagram (@coachbobandersen).

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