BALL OF FOOT- (BOF) is also referred to as the mid foot. It is the area forward of the arch, before the toes and it is where we land while running. Stand with upright, correct posture. Feet are shoulder width apart, knees are soft. Midline is tight with neutral hips. Head is on spine line (chin is not jutted out in front) and vision is forward. Arms are at 90 degree angle and shoulders are back and relaxed. Start hopping in place while holding posture 10-20 hops. Add a lean forward from the ankles and hop forward for 10 hops. Repeat 3x.

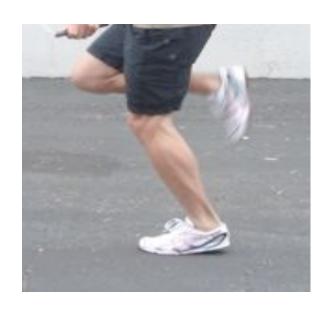
<u>WHY?-</u> This is an important drill as it teaches the client where to land while running as well as how to fall forward while maintaining tight midline.

**COMMON MISTAKES-** Landing too far forward on the foot (toe running). Not letting the heel "kiss the ground" while on BOF. Staring at the ground or leaning too far forward.

**FIXING THE MISTAKES-** Returning client to perfect posture position and find the ball of foot.





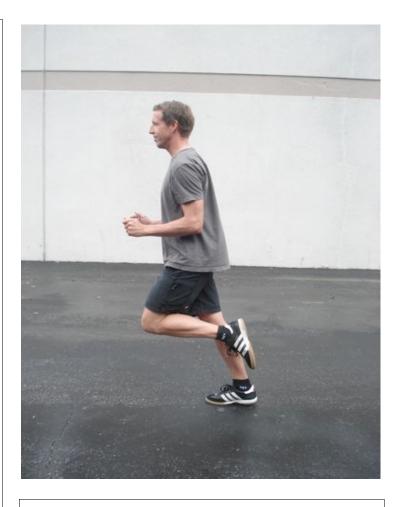


## **POSTURE DRILL -**

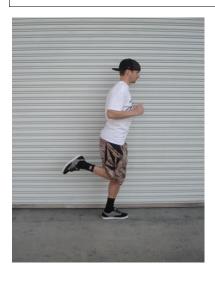
Stand up straight with head on spine line and hips straight. Abdominals are contracted and tight. Feet should be shoulder width with body weight on the ball of foot. Lift one leg off ground and pull up under the glutes, standing leg has body weight on ball of foot. Figure 4. Arms are at 90 degree angle, shoulders are relaxed and chest is out.

**WHY?** Learning the correct posture will minimize the common running injuries as well as make the client a more efficient runner.

**COMMON MISTAKES** - Jutting the neck out in front of the spine line or holding chin up (looking up). Shrugging shoulders or rounding shoulders forward. Lifting knees up too hight in front (using the hip flexors), or letting the foot trail out behind.



**FIXING THE MISTAKES-** Going over correct posture, as well as introducing the other drills will generally correct the failure to find the Figure 4 position. Maintaining a tight midline is crucial as well.







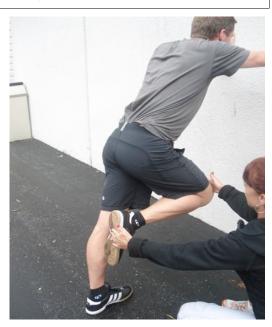
#### **WALL DRILLS**

LEAN INTO WALL-Stand with straight posture and stable midline. Shoulders are relaxed and back while holding hips neutral. Extend arms straight out and fall forward into the wall maintaining rigid body. Keep vision straight and don't look down at the ground. Run in place, pulling feet off the ground in the Figure 4.

BACK TO WALL- Stand with back and feet a few inches out from the wall. Posture is straight and weight is on ball of foot . Pull the right foot off the ground using the hamstring to the Figure 4 posture, and return to BOF. Any push off with the foot instead of lifting will result in hitting the wall behind. Perform 20 pulls with each foot.

**WHY?-** These drills teach how to fall into forward movement, holding the Figure 4 posture. As well as how to pull the foot off the ground using the hamstring without pushing off to gain distance.

COMMON MISTAKES- Breaking at the hips (butt back, chest dipped forward), pulling knees too high up, pulling foot too high, letting foot trail out behind you (not under your butt). Help client find correct position by placing a hand at their knee level and also where their foot should be pulling up.





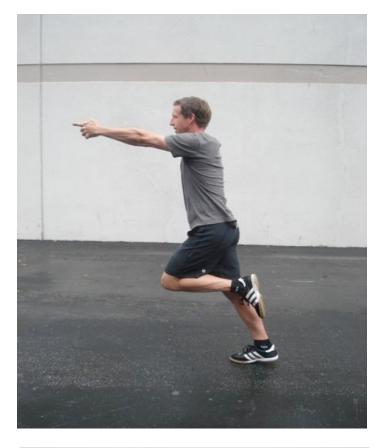


STABLE ARM FALL- (aka Gun Drill)Stand in correct posture, hips neutral, knees slightly bent and feet shoulder width apart. Shoulders are relaxed and back. Vision is forward. Extend arms out in front of body and clasp hands while keeping arms locked out. Begin running in place by pulling feet off the ground in Figure 4 posture, maintaining locked out arms and tight midline (no breaking at the waist). Fall forward at the ankles and run while keeping arms from shifting side to side. Keep eyes forward on target straight ahead. Standing knee stays slightly bent.

ARMS BEHIND BACK-similar drill to Stable arms, but arms are in locked out position behind the back.

**WHY?** - These drills help with the feeling of falling forward and maintaining midline stabilization without breaking at the hip.

<u>COMMON MISTAKES</u>-Breaking at the hip, high knees, foot trailing out behind general center of mass, or keeping knees low as well as doing "butt kickers" instead of pulling foot up under butt.



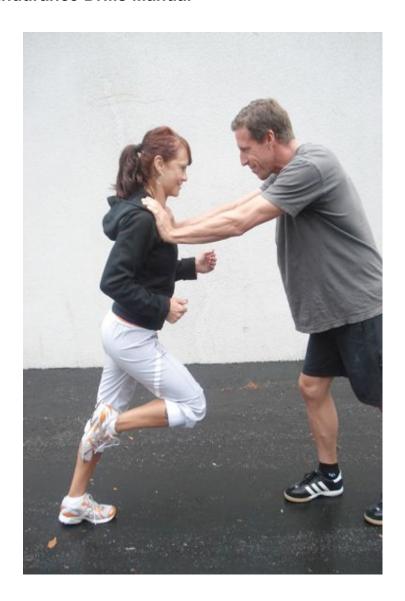


PARTNER FALL- Runner #1 stands in Figure 4 Posture while Runner #2 supports their body weight at the shoulders, keeping them from falling. Runner #1 runs in place by pulling their feet off the ground, vision is forward. Once Runner #2 feels their commitment to the lean he lets go, and Runner #1 continues with a test run, holding form.

**WHY?-** This drill gets the client comfortable with the degree of lean needed to obtain forward movement.

**COMMON MISTAKES-** Runner #1 has to severe of a lean or failure to hold correct posture by breaking at the hip.

CORRECTING MISTAKES- Return client to perfect posture holding their weight on balls of feet. While holding this tight posture, with hips neutral (no breaking) have them lean all their weight into your hands as you support their weight. Gaze should be straight ahead. As client runs in place feel their commitment to the lean. If you can push them backwards, they are not leaning enough. Let go of runner, letting them do a test run when lean has been obtained.

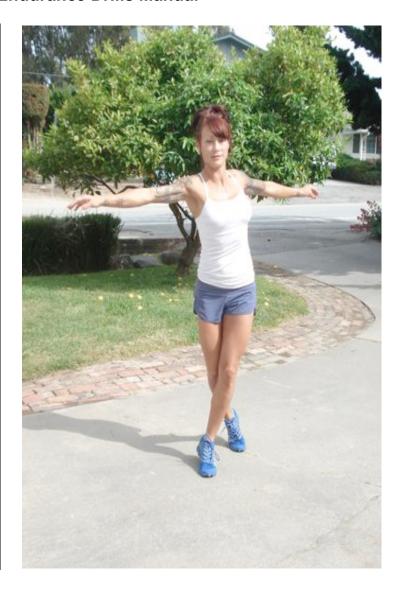


CARIOCA- Client stands with arms stretched out to sides with weight balanced on balls of feet. While leaning in one direction criss – cross the legs in front and back while moving in the direction of the lean. Repeat in opposite direction. Maintain tight midline, shoulders are relaxed.

<u>WHY? - This drill enforces in the client to</u> work with gravity to cause movement. Where your lean is, your body will go. Also teaches client to stay on ball of foot.

<u>COMMON MISTAKES – L</u>eaning at your arms instead of leaning with entire body. Failure to maintain tight midline or leaning too much. It should be a slight lean.

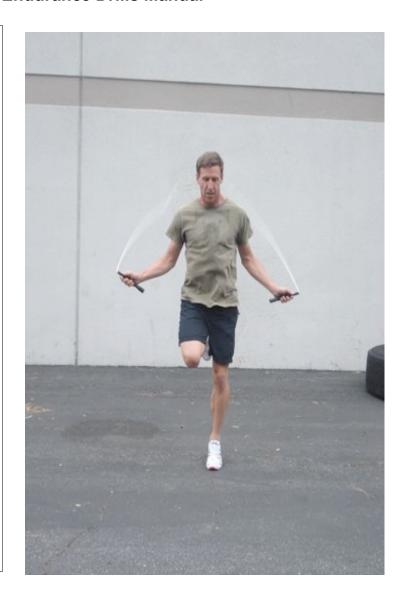
**CORRECTING MISTAKES-** Have client stand with perfect posture, midline tight and weight on balls of feet. Remind them to lean from the hip, instead of reaching with arms.



JUMP ROPE DRILL- With a jump rope stand in perfect posture with weight on balls of feet. Holding the midline tight, begin jumping rope and land softly on balls of feet. You do NOT want to heel strike while jumping rope, so maintain ball of foot landing. Begin alternating feet to simulate running in place. Add a forward lean from the hips and begin running forward while jumping rope. Have client level out and jump in place for reps, then add the forward lean for reps and repeat.

WHY? This drill teaches the client to stay on ball of foot while running, and how to lean from the ankles to obtain forward movement. Have client do a few jumps while landing on their heels then perform a few jumps landing on ball of foot. Equate this drill to the heel strike. You wouldn't land on your heels while jumping rope. Same holds true for running.

COMMON MISTAKES- Lifting the knees up too high (hip flexor running), kicking foot up too high behind or trailing foot out away from under glutes. Landing too far out in front of general center of mass, and heel striking.









#### **EXAGGERATED FORWARD LUNGE -**

Stand in perfect posture on balls of feet with shoulders relaxed and arms at 90 degrees. While holding midline tight, exaggerate pulling one foot off the ground to figure 4 position while falling forward at the ankle. Perform 10 pulls on the right, then 10 pulls on the left while moving slowly forward. Over emphasis of the pull should be a "snap" and be felt in the hamstring of the active leg. Keep ankle relaxed and do not dorsi flex. As a drill, this is not meant to be performed quickly or to cover much ground.

<u>WHY?-</u> This drill is for teaching client to keep the ankle relaxed while running, preventing heel striking. Also to feel the snap of the hamstring generated by the pull off the ground.

**COMMON MISTAKES-** The hardest thing for most clients to do is stay relaxed at the ankle. This drill requires a little coordination, slowing client down and pulling in place before adding the lean helps.

<u>CORRECTING MISTAKES</u>- Have client perform drill while following behind them, helping them pull their foot off the ground with your hand.

