PLYOMETRIC EXERCISE INDEX

LOW INTENSITY PLYOMETRIC EXERCISES EXERCISES

Ankle bounces- also referred to in some other programs as "thrusters". To perf you just jump as high as you can while using the force of your ankles and calves without much knee bend. Perform the movement rhythmically without any paus between repetitions. Can be done using 2 or 1 legs.

Jump rope- self-explanatory. If you don't have a jump rope you can mimick th by pretending to be jumping rope but this is not as effective.

4-star drill- imagine 4 numbers or stars about 18-24 inches apart. It may look something like this:

12

43

Start off at 1, jump to 2 then to 3 then to 4 then to 1 then back to 4 to 3 to 2 to 1. Hop all the way around and back. That equals 1 repetition. Can be done with 2 legs or 1 leg.

Slalom jumps- also called line jumps or slalom jumps. Simply imagine a line or low object directly on the ground under you and hop lightly back and forth across the line. Can be done with either both or 1 leg. Each ground contact equals 1 repetition. Pace will be about the same as you would use if you were jumping rope.

Ricochet jumps- also known as low stair jumps. Find a low object, box, or stairs about 6-12 inches high and using the strength of your calves only simply jump up and down in quick fashion.

Rhythmic jump squat- This exercise is known as "leap-ups" in some other programs. In a rhythmic fashion squat down and jump back up as high as possible. Can be done using either a ¼ squat motion or a deeper squat. Can be done with the hands either behind the head or with the hands reaching up with each jump.

Low squat ankle jump- Get in a low squat position while you rise up on your toes. From this position you should bounce up and down forcefully on the balls of your feet while you stay down in a squat position. Try to use the power of your hips and calves but without straightening your legs – With each mini-jump attempt to bring your feet up towards your chest

Bent over donkey ankle bounces- Find an object about waist high you can lean against for support. To perform the movement you bend over until your upper body is parallel to the ground and resting the majority of your upper body weight on the object. Your legs will be back behind you and straight. The exercise gets its name from an old bodybuilding calf exercise called Donkey Calf raises. The idea was to have someone sit on your back as you perform straight legged calf raises. You will be doing the same thing, only you won't have anyone sitting on your back and you will be leaping up using the power of your calves and ankle extensors. Can be done with 1 or 2 legs and also jumping with 2 and landing on 1.

MODERATE PLYOMETRIC EXERCISES (UP VARIETY)

The following exercises place an emphasis on starting and explosive strength without such an emphasis on reactive strength. Most of these exercises have you starting off from the ground and jumping <u>on</u>, <u>over</u>, <u>or</u> <u>above</u> something without a chance to get much bounce into the action.

On-box jump- From the ground simply jump onto a box or bench and then step-off - Can also be done unilaterally.

Standing broad jump- Stand in a stationary position and jump up and forward as far as you can. Pause and re-set yourself and perform the required number of repetitions.

Double leg bounding- also known as leapfrogs – This exercise is performed much like a standing broad jump but is more rhythmic in nature and the squatting phase is not as deep. Jump up and out as far as you can and immediately execute another jump at ground contact.

Hurdle barrier jump- Set up objects in front of you that are approximately as high as your best vertical jump. Now simply jump over them one at a time. Try to perform the entire set smooth and with little effort. This exercise can be done unilaterally as well. If you don't have objects or hurdles you can also use imaginary objects.

Knees to chest tuck jump- From a stationary position jump as high as possible while bringing your knees up into your chest. At ground contact immediately straighten your legs and execute another jump.

Star Jump- Bend down and grab your ankles and then jump up while you spread your arms and your legs so that you look sort've like a star. Hit the ground, reset for a second and repeat for the desired # or repetitions.

Burpee- Also known as a "squat-thrust"- Start with your feet shoulder width apart and standing erect. Squat all the way down until your hands touch the ground on either side of your legs. From this position kick your legs all the way back so that you're now at the start of the push-up position. From this position bring your legs back even with your hands so that you're now in sort've a deep squat position. From here jump up as high as possible. At ground contact repeat the entire series.

One-legged step up jump- Also known as 1-legged bench jumps or split squat jumps – Find a bench about 18-24 inches high and place one leg on the bench with one leg on the ground. Now, from a dead stop and without bending down at all, jump as high as possible and land in the exact same position with the same leg on the bench and the same leg on the ground. Pause for a second and repeat. Perform all the reps for one leg before moving on to the other leg.

Box squat jumps- also known as sit jumps- Sit back on boxes or a chair in a ¼ or 1/2 squat position. From this position jump up as high as possible or out as far as possible. You can also have another box you can attempt to jump on or over. By varying the height of the box you're sitting down on you can vary the intensity of the exercise.

Paused Squat Jump- Done like a rhythmic squat jump only this time you pause for 3 seconds at the bottom of each repetition.

Leap Frog Jump- Squat down with your hands on the ground. Next, jump up and out as far as possible, land, squat down once again, touch the ground and repeat.

MODERATE REACTIVE EXERCISES

These include all types of commonly known medium intensity reactive plyometric movements.

Rim jumps- Using a basketball goal or other high object as a target jump up and down without any pause between repetitions attempting to touch the object.

3 steps + jump for height (double legged variety)- Take 3 steps and using a quick jump stop jump for maximal height.

Lateral cone or obstacle jumps- Using cones or low obstacles (12-18 inches) jump back and forth over the object. Performed just like line/slalom jumps except you should be using an actual object to jump over and the jumps will be higher and more intense. Each ground contact equals one repetition.

Low box depth jumps- Using a low box (<18 inches) stand on the box and step off. At ground contact either immediately jump up as high as possible or jump up onto another box if you have one available. If you don't have another box turn around and step back up on the box and repeat or if using another box simply turn around on that box and repeat. Each ground contact equals one repetition.

Low box depth jumps for height- Using a very low box (6-12 inches) stand on the box next to a wall, goal, or something that you can reach up and try to touch or grab. Step/bounce off the box and at ground contact immediately jump up and reach for your target - This is the

same type of box jump used in the testing portion.

Low side to side box jump- Using a box lower then 18 inches start off on the box and jump off to one side – At ground contact immediately bounce back up on the box, then step off to the other side, hit the ground, and rebound back up on the box. Repeat to the other side continuing to go back and forth. Each ground contact equals one repetition.

Rhythmic alternating lunge jumps- From a lunge position push off of both legs simultaneously and jump up as high as possible. When you're in midair switch legs and land in the same position you started but with the opposite leg forward. Perform this exercise smooth and with rhythm. As soon as you land immediately execute another jump. Complete for the desired number of repetitions.

HIGH-INTENSITY REACTIVE PLYOMETRICS

"Shock" or Altitude lunges- From the standing position simply jump up as high as possible and land in a lunge position with the front leg at around a 90 degree angle or parallel. Try not to move as you absorb the impact. Re-set and repeat for the desired number of repetitions. The main emphasis here is on the landing not the pushoff. When you land in the lunge position, try to absorb the force of the impact with both legs so that your lead knee doesn't absorb all the stress. This places the majority of the stress on the hamstrings and glutes.

Deep lunge jumps- From the deep lunge position push off of both legs simultaneously and jump as high as possible. The emphasis here is on the pushoff. Land in a deep lunge position with the same leg forward. Absorb the impact, pause briefly, then immediately execute another jump and continue completing all the repetitions for that leg before advancing on to the other leg. When you land in the lunge position, try to absorb the force of the impact with both legs so that your lead knee doesn't absorb all the stress. This places the majority of the stress on the hamstrings and glutes.

Low squat ankle jump into lunge jump- This is an advanced level exercise - standing erect with feet shoulder width apart squat down into the low squat position and bounce once then jump up as high as possible. In mid-air assume a straddle position so that you land in a lunge position with the lead leg roughly parallel to the ground. At ground contact immediately jump back up out of the lunge position as high as possible and land back in the low squat position. Repeat all the reps for the desired leg prior to advancing on to the other leg.

Low squat ankle jump into paused or "shock" lunge- From the low squat position bounce once then jump up high and land in a deep lunge position. Absorb the impact, try not to move, and after pausing for 2 seconds once again reset into the deep squat position and repeat for the desired number of repetitions. The emphasis of this exercise is on the landing. When you land, try to absorb the impact with both legs so that your lead knee doesn't absorb all the stress. This places the majority of the stress on the hamstrings and glutes.

High box depth jumps- Using a high box (>18 inches) but up to over 36 inches, stand on the box and step off, upon hitting the ground either immediately jump up as high as possible or jump up onto another box if you have one available. The distance that you jump away from the box should be approximately the same distance as the height of the box. So if you're jumping off a 36-inch box you should jump approximately 36 inches out. If you don't have another box turn around and step back up on the box and repeat. If you are using 2 boxes simply turn around on that box and repeat. Each ground contact equals one repetition.

Drop Jumps- Also known as "shock" and "altitude" depth drops. Using a high box (>24 inches) stand on the box, step off, and bending the knees as little as possible and staying on your toes simply attempt to absorb the impact. Hold the landing for a few seconds and get up on the box and repeat for the desired # or repetitions per set. Like depth jumps, the distance that you jump away from the box should be approximately the same distance as the height of the box.

SHORT RESPONSE PLYOMETRIC EXERCISES AND UNILATERAL VARIETIES

Most of these exercises are executed unilaterally (single leg) and generally require a shorter ground contact time. For this reason they tend to be more effective at increasing 1-leg jumping performance.

3-step + jump for height- Take 3 steps and jump as high as you can. In between repetitions walk back to your starting point and repeat. You can either repeat all the repetitions for 1 leg before moving onto the other or alternate jumps with each rep, one rep take off of the left leg, the next rep take off with the right leg and go back and forth.

1-2-3 Jump- This is a drill that is performed in rhythmic alternating fashion. Take 2 short steps and jump as high as possible. As soon as you hit the ground take 2 more steps and jump with the opposite leg this time. Continue to do that alternating push off legs back and forth without stopping until the desired # of repetitions are complete.

Power Skipping- Using an exaggerated powerful skipping motion attempt to jump as high and far as possible with each skip alternating legs with each skip - Usually done for a pre-determined distance such as 25 yards or 40 yards.

Standing triple jump- Standing in the erect position with feet shoulder width apart squat down and jump up of both legs as far and high as possible. Land on either the left or right leg and immediately upon landing again jump up as high and far as possible this time pushing off with the same leg you landed with. Land with the other leg and once more push off with that leg and jump as far as possible. It's basically a 2-legged jump, immediately followed by a 1-legged jump, immediately followed by a 1-legged jump, immediately followed by another 1-legged jump off the other leg. Walk back to the start and repeat for the desired # of repetitions.

1-leg speed hop- also known as 1-legged bounding - Usually done for a pre-determined distance such as 10 yards or 20 yards. Simply hop on one leg as fast as you can for the desired distance trying to maintain a straight plant leg. This exercise can also be done with a sprint into a 1-leg speed hop. In this version you start off with a moderate sprint and without slowing down begin bounding forward on one leg.

Sprinting- The act of sprinting is self-explanatory but what many do not realize is that sprinting is very effective at training short response reactivity. In the programs sprints are done from a standstill and also done with a version called **acceleration sprints**. In this version you start off striding forward for 10-20 yards at a slower pace and then suddenly accelerate for the required distance.

1-leg box jump- This is an on/off box jump done with one leg. Set a box in front of you at a level somewhere between your ankles and your knees. You will stand on the ground on one leg. Next, hop up and tap the box with the same leg you jumped with and then quickly come back down, touch the ground and instantaneously spring back up on the box. The important thing to focus on is full extension of your leg at ground contact so that you recruit the glutes and hamstrings. If you do it correctly there should be little voluntary effort instead you should reflexively bounce on and off the box.