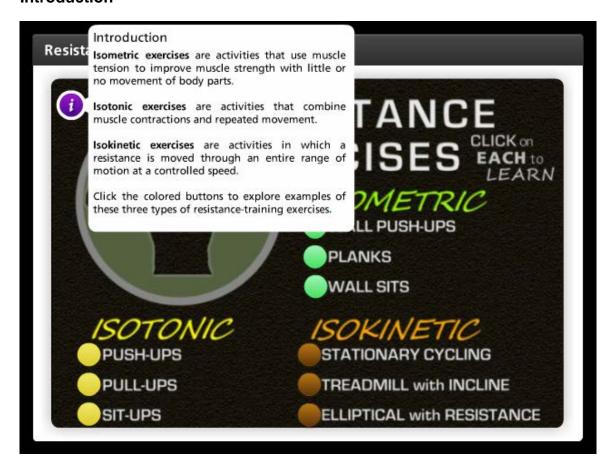
#### Introduction



**Isometric exercises** are activities that use muscle tension to improve muscle strength with little or no movement of body parts.

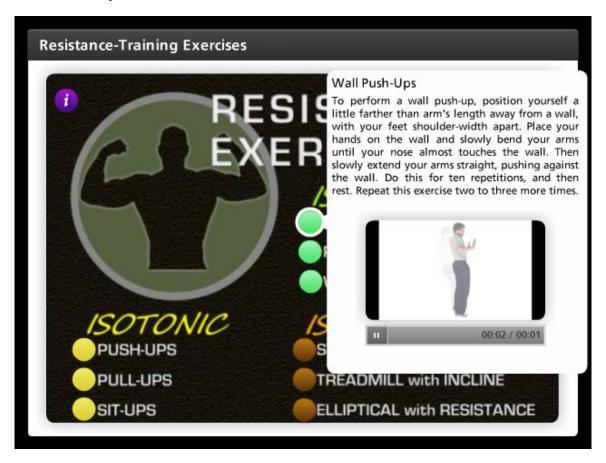
Isotonic exercises are activities that combine muscle contractions and repeated movement.

**Isokinetic exercises** are activities in which a resistance is moved through an entire range of motion at a controlled speed.

Click the colored buttons to explore examples of these three types of resistance-training exercises.



### Wall Push-Ups



To perform a wall push-up, position yourself a little farther than arm's length away from a wall, with your feet shoulder-width apart. Place your hands on the wall and slowly bend your arms until your nose almost touches the wall. Then slowly extend your arms straight, pushing against the wall. Do this for ten repetitions, and then rest. Repeat this exercise two to three more times.



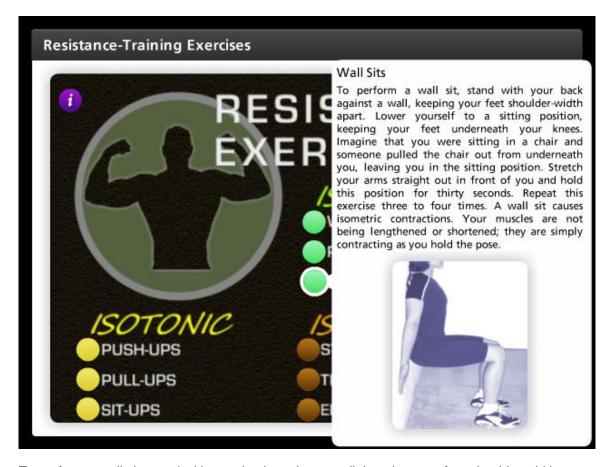
#### **Planks**



To perform a plank, assume a push-up position, but place your elbows underneath your chest and rest your body on the floor. Much of your body weight will be resting on your forearms. Push yourself up from this position with your weight still resting on your forearms. Hold for ten seconds. Repeat this exercise two to three times.



#### **Wall Sits**



To perform a wall sit, stand with your back against a wall, keeping your feet shoulder-width apart. Lower yourself to a sitting position, keeping your feet underneath your knees. Imagine that you were sitting in a chair and someone pulled the chair out from underneath you, leaving you in the sitting position. Stretch your arms straight out in front of you and hold this position for thirty seconds. Repeat this exercise three to four times. A wall sit causes isometric contractions. Your muscles are not being lengthened or shortened; they are simply contracting as you hold the pose.



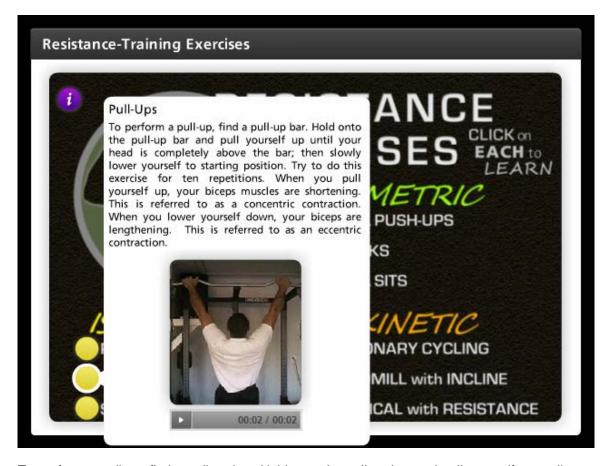
### **Push-Ups**



To perform a push-up, lie on your stomach. Put your arms underneath your shoulders and push your body off the ground, keeping your body in a straight line. Then lower yourself until your arms are bent in a ninety-degree angle, and push yourself back up. Do this for ten repetitions and then rest. Repeat the exercise two or three more times.



### **Pull-Ups**



To perform a pull-up, find a pull-up bar. Hold onto the pull-up bar and pull yourself up until your head is completely above the bar; then slowly lower yourself to starting position. Try to do this exercise for ten repetitions. When you pull yourself up, your biceps muscles are shortening. This is referred to as a concentric contraction. When you lower yourself down, your biceps are lengthening. This is referred to as an eccentric contraction.



### Sit-Ups



To perform a sit-up, lie with your back on the ground. Bend your legs so that your knees are pointing toward the ceiling. Put your arms across your chest or behind your head. Curl your upper body so that your arms are touching your knees, making sure not to pull your head. Then slowly return to starting position. You may need someone to hold your feet so that they do not rise off the floor. Do this for one minute. Rest. Then repeat two or three more times.



## **Stationary Cycling**



When using stationary cycling, increase the resistance and/or stand slightly.



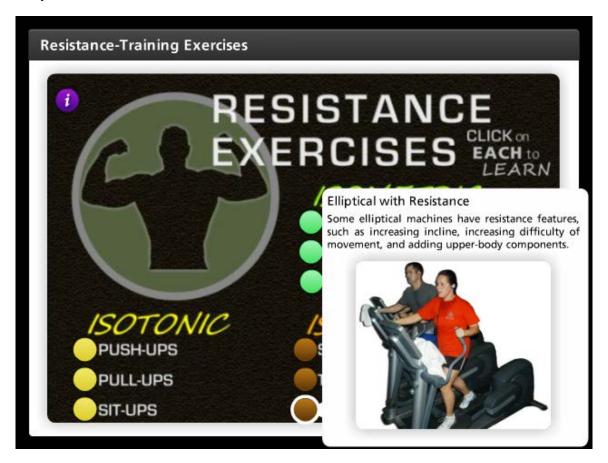
#### **Treadmill with Incline**



Increase the resistance on a treadmill by increasing the incline.



## **Elliptical with Resistance**



Some elliptical machines have resistance features, such as increasing incline, increasing difficulty of movement, and adding upper-body components.

