Patty's PT Tips

Isokinetic Exercises **November 17, 2021**
Strength Training with Less Effort

Isokinetic exercise is a type of strength training. It uses exercise bands to produce resistance no matter how much effort you expend. Your speed can remain consistent despite how much force you exert. Different colors of bands create different amounts of resistance.

You can adjust the exercise speed and range of motion to suit your needs. Different positions can isolate and target specific muscle groups. You can use Isokinetic exercise to test and improve your muscular strength and endurance.

Isokinetic exercise refers to movement at a constant speed regardless of the force applied. Muscles contract and shorten at a constant speed in isokinetic contraction. Isokinetic exercise allows muscles to gain strength consistently all through the range of movement. Resistance continues as you return slowly to the starting position.

With isotonic exercise, the muscle shortens at a constant rate throughout the motion, but the muscle tension varies. This can also be called a dynamic contraction. Weight training is isotonic. For example, exercises such as dumbbell curls and squats isolate certain muscle groups and strengthen muscles throughout the range of movement, but not evenly.

Isokinetic exercises are often used for rehabilitation and recovery since it's a controlled form of exercise. PT's and OT's use it to treat imbalances in the body that have the potential to cause injury. Being able to control the resistance and speed helps to:

- prevent injury
- increase muscle flexibility
- control muscle development

Isokinetic exercise is a form of strength training that can increase muscle tone, strength, and endurance. It can also help improve balance and coordination, and boost metabolism.

Strength training makes everyday activities easier to perform, and can increase your movement/athletic performance. It can also have a positive effect on your cognitive function and quality of life.

Isokinetic exercise also has a beneficial impact on the core muscles that support the spine and stabilize the body. It is one of the safest forms of exercise.

Isokinetic exercise is also safe for people with injuries. The resistance makes it harder for you to push yourself beyond what your therapist/trainer recommends. You're also less likely to pull muscles or have complications, like sore muscles, from the exercises.

It's important that you exercise safely to protect your body. Balance strength training with exercises that promote cardiovascular health and flexibility. Always start by warming up the body with active dynamic stretches, or walking/wheeling. Then do some gentle stretches to loosen up your body.

Drink plenty of water and maintain proper hydration before, during, and after your workout. Take at least a few minutes to cool down after your workout. Doing gentle stretches will also help to prevent soreness and injuries. Pay attention to your body! Take your time, and breathe regularly. Exhale with effort. Stop working out if you feel pain or discomfort, and always use proper form and alignment while completing the exercises to prevent injury. Take plenty of rest, and schedule days off from exercise, especially if you experience pain and fatigue. Vary your workouts but repetition reinforces neuromuscular learning. Hurray for neuroplasticity!!