Functional Training

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What is Functional Training? Functional Training is a method of training, where the focus is on training movements, utilizing multiple muscle groups. Function by definition means, "Any group of related actions contributing to a larger action. To be scientific, it can be defined as the ability of the neuromuscular (this is the mechanism that links our brain to our muscles), system to perform dynamic (which is a fancy word for motion), eccentric, isometric and concentric contractions efficiently in a multiplaner environment. Multiplaner refers to how our bodies relate to the direction of a movement. Are we moving forward, sideways or transverse (which is something like turning back to whack a tennis ball.) Functional Training integrates all three planes of movement and replicates motion patterns that we perform in our everyday lives. Things such as, getting in and out of bed, walking, reaching, and pulling open a door, pushing a grocery cart, picking up a dropped item from the floor.

A functional training program incorporates balance, agility, posture, strength, and coordination exercises. Major muscle groups are commonly used in a functional training workout with contribution of the small muscle groups to assist with the movements. Functional training does not isolate individual muscle groups but integrates the muscles to execute the movement. Some examples of functional exercises include squats with dumbbells combined with overhead shoulder presses, lunges in all planes of motion, step-ups, single arm cable machine push/pulls, and various stability ball routines. The equipment used in a functional training program is much less expensive than the typical resistive exercise machine used in the gym. Some of the tools used in a functional training program include medicine balls, physioball, thera-band, rocker board, slide board, cable machine, gel cushion pad, 12 inch step and plyometric box.

Exercises are most functional when they closely resemble a movement pattern that is commonly used in everyday surroundings. Training methods that are different from the actual movement will have less impact on improving that particular function. When a person is performing an activity there are constant

adaptations that the body has make to changes in the movement, the body activates its muscles in coordinated patterns and after numerous repetitions, the brain and muscular system, (neuromuscular system) develops memory traces. A person's mental skill will improve when performing functional and free weight exercises because there is a greater need to focus on the movement patterns, rather than a single isolation movement. So your body learns how to swing a golf club efficiently, because it has had practice simulating that movement in an exercise previously performed. .

Another aspect of functional exercise is that it requires the body to maintain its center of gravity over its base of support. To maintain the body's center of gravity over its base of support, such as in standing and walking, the body activates a multitude of stabilization muscles. Stabilization muscles are those muscles that help us hold up our head, and stand erect. Combining strength exercises and stabilization exercises in a functional training routine recruits an array of muscle activity and challenges the body at a higher level. For example, a dumbbell squat on a balance board combines a strength exercise with a lower extremity stabilization exercise. The body has to stabilize over the balance board while simultaneously performing a leg strengthening exercise such as the squat.

Proper program design is essential and should focus first on developing a strong stable core by strengthening the abdominals and back muscles. The "core" is the group of muscles located in the torso, hips and pelvis. They are also known as the "powerhouse" of the body. The torso or trunk muscles provide spine stabilization. Studies have shown that muscular endurance in these types of exercise is more important than absolute strength because it is more protective of the spine, which results in a healthy back.

Summary:

The goals of functional training are to minimize injury, train in an environment that improves task related skills, improve human performance and increase over all body strength. Functional training is a comprehensive approach used to improve human performance including core strength, reactive movement, flexibility, speed, and trunk stabilization. Train the movement and the muscles in the body will become more efficient when performing a chosen activity. Functional exercises increase the efficiency of the body's neuromuscular system to perform intended movements; it also improves the body's center of gravity over base of support, thus improving balance, agility, and movement patterns relevant to work and everyday activity. Besides all of the science, and theory, it really is a fun way to train. You move more, laugh more and go home with a usable skill. Having a pretty bicep is nice, but having a bicep that can relate to other muscles, thereby resulting in real strength can improve your quality of life.

After years of traditional training, integrating functional training has been very challenging, and spiced up my routine. Whether you are a 20 year old athlete or a 70 year old non-athlete, male or female, functional training will improve the game of life.

Biography

Patricia Tremblay ,B.S. and is a NSCA certified personal trainer and owns Physiques By PT, a personal training and consulting company specializing in on site fitness programs.