Functional Training #1: Introduction

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"When we lose the ability to move in full and uninhibited ranges of motion, the quality of life, sport, and work are decreased." Annette Lang, Reebok Alliance

What is *Functional Training*? Functional training is more "real world" in terms of your training actually mimicking a broader spectrum of your daily movements. Functional Training is useful whether you are an athlete or recreational exerciser wanting to improve general health. Functional Training gives you better balance and muscular control during everyday movements. For example, teaching yourself to balance in a neutral or static position with both feet on the ground is a great beginning; however, in the real world you need the ability to balance and maintain control during movement. The human body must be able to achieve and maintain balance in a variety of different positions, planes/angles, and conditions to be totally functional. "Functional balance" is dynamic just like real life. To achieve dynamic balance, you must train dynamically—*this means you gotta move!*

Functional Strength is "dynamic strength" you can use! Developing biceps strength on a curl machine while in a fixed plane of motion is not very functional. You can increase biceps strength on a machine, but this type of general strength does not mean you will greatly increase your performance in functional movements outside of the gym. The body needs to be trained in multiple planes and angles as with real life movements—not just in a fixed plane like the machine. Because functional training more directly mimics the actual activity you wish to perform in real life, strength conditioning should also involve dynamic movements that teach the body how to actually use available strength in everyday functional movements. Dynamic, or "functional" strength training, will also improve your balance. Functional balance means you will have better control of your daily movements and activities.

Functional Training is very "core" oriented. All balance and movement starts in your core or midsection; therefore, Functional Training starts with "core training." Core is more than just front abdominals—core is the whole midsection of your body that goes from groin to upper back and chest—including sides. Without good core development, you will not be able to move and react efficiently whether casually walking on a trail or playing professional football. Good core development from Functional Training will enhance all human movement for all populations and activities of daily living. Functional Training is not just for athletes—it's for everyone!

Foundational Concepts & Suggestions

- Train the core before the extremities.
- Train joint stability/integrity before joint mobility.
- Train "movements" instead of just isolated muscles.
- Functional Training is "toe nails to finger nails" training! (Gambetta)
- Optimal Functional Training occurs in multi-sensory, multi-plane, multi-joint environments.
- Each functional movement should be mastered before moving to the next level of difficulty.
- ✓ Emphasize maximum Range of Motion (without being unsafe).
- ✓ Master movements with body weight before adding external resistance from weights, bands, tubing, or an apparatus.
- ✓ Use the greatest speed that can be "controlled."

Joint Stability vs. Joint Mobility

One of the foundational principles of Functional Training is training "stability" <u>before</u> "mobility." Using balance as an example, if you are not stable balancing in a static position, joint mobility and flexibility are secondary. You need to stabilize your joints (controlled strength) before you worry about enhancing mobility and increasing movement. Dynamic balance exercises improve stability around joints during movement. However, you first have to master "static balance" before adding dynamic movements.

<u>Joint Stability</u>: The ability to maintain a posture or control motion. Stability can be either static or dynamic. Static stability is the ability to "maintain stillness" in a certain position or posture. Dynamic stability is the ability to control and/or to decelerate motion. Stability is "reactive" in nature; it is the body's automatic response to unstable or changing environments.

<u>Joint Mobility</u>: Degree of freedom of movement around a joint or body segment. Mobility is a balance of flexibility, strength, and uninhibited motion. Mobility should be the initial goal of functional movement <u>after</u> static balance is mastered.

Checking Your Balance

Here are some assessments to check your balance. If you don't have good balance on these tests—then you don't have functional control of your core or midsection. **Remember—ALL movement starts in your core, so core training is important!**

*Note: Each test must be mastered before moving to the next. If you feel these are too challenging, try them next to the wall or have someone with you for assistance in case you lose your balance. When you can master one level, move to the next assessment.

- 1. Stand still with both feet on the ground shoulder width apart.
 - You should be motionless, have total control, & without any other supports.
- 2. Lean forward 12-15 inches without moving your feet. You'll be leaning out "on your toes" a little bit as you displace your center of gravity. Flexion should come from ankles, hips, and low back. Stabilize for a few seconds, then return.
 - If you can't lean forward 12-15 inches (use tape marks on wall next to hands if desired to mark start and finish lines) without taking a step to prevent yourself from stumbling, you don't have functional balance and are more likely to fall.
- 3. Pick one foot up off the ground and stand with control and stillness.
 - Maintain control for 10 seconds. Switch foot and repeat. As long as the foot is off the ground, ½ of your base of support is removed. The lifted foot can come straight up, against the other knee—or wherever comfortable.
- ✓ If you cannot do all three tests successfully, you do not have good enough balance to control dynamic and truly functional movement. You might have enough balance to control your "current" movements—but if your balance is not good enough to pass these tests, you've already restricted many of the functional movements needed to be fully independent and mobile. Fear not! This just means it's time to start a functional training program so YOU CAN IMPROVE your balance and regain higher levels of functional movement, independence, and mobility! ⑤

References

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