

Enhancing Aesthetic Elements & Human Movement Through Balance

(Ron Jones, CSU, Northridge, KIN 428, Spring 2002)



“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

Balance underlies all movements! Balance is one of the fundamental movement skills. If you can't balance, your movements will be awkward or even unsafe. Functional balance (dynamic equilibrium) is the interplay of imbalance and balance as the body constantly tries to regain balance to perform efficient movement using these senses: ocular (vision), vestibular (inner ear), kinesthetic (body position awareness), and auditory (hearing).

There are two “zones” of balance. Begin training the inner zone (close to center of gravity) before training the outer zone (beyond the static stance center of gravity). The amount of balance training volume should be small, but you should work on balance everyday.

--The Balance Continuum--

(↓Challenge) Inner > Outer > **Functional Threshold** > Balance Threshold (↓Balance)

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.
 - ✓ If you've lost some balance ability—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! ☺

Balance Challenge & Progressions

Now put it all together—static balance, dynamic balance, proprioceptive demand, and dynamic stability to go through the following positions and progression challenges of balance exercises. **Be creative!** ☺

Basic Positions	Progression Challenges
<p style="text-align: center;"><u>Inner Zone Balance</u></p> <ol style="list-style-type: none"> 1. Bilateral Stance (both feet, shoulder width apart, arms counterbalance) 2. Bilateral Stance (without arms) 3. Unilateral Stance (with arms counterbalance) 4. Unilateral Stance (without arms) 5. Bilateral Squat <p style="text-align: center;"><u>Outer Zone Balance</u></p> <ol style="list-style-type: none"> 1. Bilateral Squat & Reach 2. Lunge (with arms counterbalance) 3. Lunge & Reach 4. Unilateral Squat <ul style="list-style-type: none"> • Positions: #1 (easy) to #4-5 (harder) 	<ol style="list-style-type: none"> 1. Head turned 2. Dominate eye closed 3. Both eyes closed 4. Varied surface (grass, incline, decline, dirt) 5. Apparatus (foam pad, core board, BOSU!) 6. Dynamic movements <ul style="list-style-type: none"> • (uni-plane to multi-planar) 7. Increase range of motion (ROM) 8. Increase speed (while maintaining control!) 9. Add reaction (directional cues) 10. Add external kinesthetic stimulus (push/pull) <ul style="list-style-type: none"> • Progressions: #1 (easy) to #10 (harder)

References

Boyle, Mike. Mike Boyle Strength & Conditioning
 Clark, Michael. National Academy of Sports Medicine (www.nasm.org)
 Ettinger, Mitchell, & Blair. "Fitness After 50: It's Never Too Late to Start!" (1996)
 Gambetta, Vern. Gambetta Sports Training Systems (www.gambetta.com)
 Lang, Annette. Reebok Alliance (www.reebok.com)
 Santana, Jose Carlos. Optimum Performance Systems (www.opsfit.com)

*www.ronjones.org "High-Performance Health" (4-28-02)