Functional Exercise

Current Names

- Functional Stability Training
- Functional Integrated Strength Training
- Functional Progressive Training
- Functional Integrated Stability Training
- Active Stabilization
- Functional Exercise
- Stability Training
Themes of Functional Training

- Movement that matters
- Purposeful movement
- Lifestyle physical movement
- Exercise that meets the demands of life

Isolation vs Integration

Segmented action

- Spinal stabilization
- Core activation
- Shoulder girdle stabilization

‘The body is a unit’
**Terminology**

- Spinal Stabilization: Must precede movement by extremities, especially when standing
- Deep Abdominal Wall Activation: (Internal corset)
  - Abdominal hollowing
- Inner Unit Muscle Recruitment: Transverse abdominus, internal obliques, multifidus, diaphragm
  - Intersegmental control for lumbar spine

**Functional Principles**

- Body is a link system (Gambetta, 1998)
  - Condition/prepare body as a link
  - Performance/function are a series of integrated and coordinated movements (walk, run, jump, swing, throw)

- Synergistic nature of muscles, joints, proprioceptors (Gambetta, 1998)
  - No joint or body part works in isolation
  - **Train movements not muscles** (North, 1992)
  - Training individual muscles isolates/breaks kinetic chain
Functional Exercises Need to Be!

- Exercises that challenge joint, muscle, and tendon receptors to:
  - Provide feedback regarding joint and limb position and reposition accordingly (Gambetta, 1998) “The Gambetta Method”
  - Improve biomotor abilities; agility, coordination, balance/stability, flexibility
  - Resemble movement patterns that are commonly used in the client’s work, life, or sports environment

Functional Exercises Need to:

- Facilitate multi-joint involvement
  - Think integrate not isolate
  - CNS: programmed for integrated movement; not isolated muscle function
    - Involve agonists, antagonists, synergists, stabilizers, neutralizers which all work together to reproduce efficient movement
  - Exercises should:
    - Engage superficial core muscles: produce force
    - Engage deep core muscles: provide stability
Functional Exercises Need to:

- Exercises should:
  - Express strength from the core outward
  - Challenge the body to maintain ideal posture