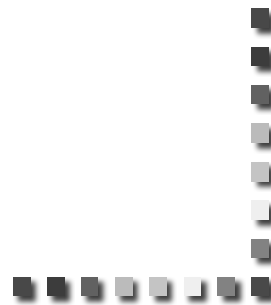
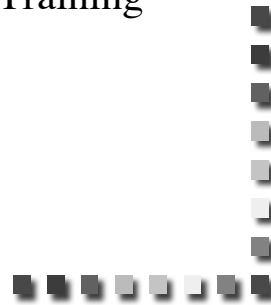


Functional Exercise



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



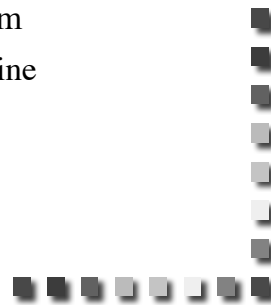
Segmented action

**Spinal stabilization
Core activation
Shoulder girdle stabilization
'The body is a unit'**



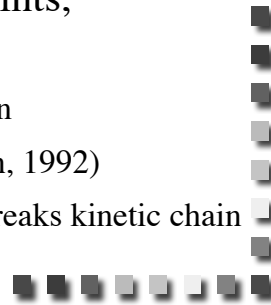
Terminology

- 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



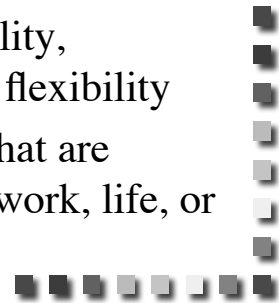
Functional Principles

- 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



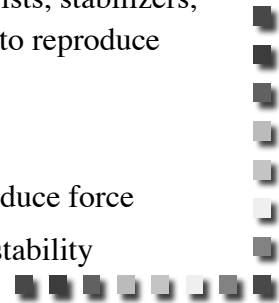
Functional Exercises Need to Be!

- 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

