WAKEFIELD SPORTS CLINIC

Core Strength and Stability

Deb Wadham, Physiotherapist
M. Physio (Musculoskeletal and Sports),
B. Physio (Hons.)
Wakefield Sports Clinic & West Adelaide Football Club (notes from presentation March 1, 2009)

Relevance of Core Stability and Strength

- Injury Prevention
- Improved performance
  - Increased running pace and endurance
  - Improved ability in tackles/ marking contests

Core Stability

Ability to efficiently control postures and movement of the lower back / pelvis / hips
Provided by many muscles working in a balanced and coordinated way
Deeper muscles tend to provide stable foundation while outer muscles perform movement

Injuries often associated with poor core stability

- Lower Back Pain
- Osteitis Pubis
- Hamstring Strains
- Quadriceps (Driver) Strains
- Groin Strains
- Hip Flexor Strains
- Patellofemoral (Knee Cap) Pain
- Shin Splints

Assessing Core Stability

Simple Test for Abdominal Stability

Lying on back with knees bent
Hands on hip bones at the front of pelvis
Lift one knee and lower it
Lift other knee and lower it
What did you feel?
Did the bones move?

Assessing Gluteus Medius Function

Walking/Running
Do the hips stay level? Does the player lean side to side?
Single leg bridge
Can the player do it? With control?
Keeping pelvis level?

Activating Deep Abdominals

Pull in SLOWLY through lower abdomen
Feel the muscle tighten (use fingers located just to the inside of the bone points of the hips)
DON'T: Push tummy out, Change position of lower back while contracting muscle

Core Exercises

Lower Level → Higher Level

- Knee lifts
- Leg straightening
- Single leg pulse
- Single leg cycle
- Double leg cycle
- All 4 leg lift
- All 4s diagonal arm and leg lift

- Bridge
- Single leg bridge
- Ball bridge
- Lunge
- Single leg squat
- Situps
- Plank

Integrating Core Stability into Cardiorespiratory Exercise

- Side stepping
- Grapevine
- Jumping
- Hopping
- Agility courses/change direction
- Take off and landings (e.g. marking)