**What Everyone Needs...**

**A Core**

Katie Willett PT, DPT
Cook Children’s South Rehab
1919 8th Ave
Fort Worth, TX 76110
682-885-5684

---

**Objectives**

- Participants will learn the relationships of a strong core and preventing injuries.
- Participants will identify how core strength not only helps in sport, but other aspects of life.
- Participants will identify population that will need modifications to core training.
- Participants will recognize that every child/adolescent needs a strong core and how do we implement it in the school system.

---

**What?**

**Why?**

**Core**

**Who?**

**How?**

---

**Link between our arms and legs**
**Diaphragm**

Abdominals

Paraspinals & gluteals

Pelvic Floor & Hip Girdle

**Local Core Muscles**

- Transversus abdominis
- Multifidus
- Internal oblique
- Pelvic Floor

**Global Core Muscles**

- Erector Spinae
- External Oblique
- Rectus Abdominus
- Quadratus Lumborum

**Other Noteworthy Contributors**

- Gluteals
- Hip abductors
- Hip external rotators
- Diaphragm
Are you **STABLE?**

Neural Structures

- Proprioceptive
- Visual
- Vestibular


the weakest link
What's under the hood?

Cook Children's SPORTS Rehab

What? Why? Core
Who? How?

Who needs core strength?

Injury prevention

- ACL tears
- Patellofemoral pain syndrome
- Iliotibial band syndrome
- Scoliosis
- Low back pain

Cook Children's SPORTS Rehab
What about non-athletes?

Can you breath and move at the same time?
Sports Conditioning and Core Stability Training

- Pre-season/In-season
  - Increasing core strength and power
- Post-season
  - Increasing core endurance and improving proprioception and reaction times
Healthy People 2020

Now Take it and Run with it!

Cook Children's SPORTS Rehab
References


Naylor, PJ.; McKay, HA. “Prevention in the first place: schools a setting for action on physical activity” British Journal of Sports Medicine, 2009; 43(1):1-1.
