

Session 7

PATHFIT II-Activity 2 Core Exercise

A. Introduction

This session will provide idea on designing a core-based exercise plan particularly for students in Physical Education. The presented activities aimed at providing virtual guide for Physical Education teachers and students. Included also are presentation of the target muscles that are activated when doing the activities in this session. All the activities are considered "basics" since it only shows easy to follow activities as bases in creating complex core exercises.

B. Session Objectives

- Identify the different types of core muscles and muscle group.
- Determine the significance of core activity or workout in everyday movement routine.
- Identify the various exercises in improving core stability that can be applied to personal fitness plan.
- Perform basic non-locomotor core exercises that can be incorporated to PE class activities.

C. Session Content

1. Topic 1: MUSCLE GROUPS FOR CORE EXERCISES

The muscle groups that are involved in performing core stability exercises are pelvis, hips, abdominal region and lower back.

Functions of the core region for everyday living of an individual:

- *Walking* *Lifting*
- *Bending* *Getting up (from chairs, floor, bed)*

Benefits for strengthening the Core Region

- *Stabilization*
- *Postural Control*
- *Efficiency and effectiveness of movements*
- *Lessen the risk of injury*
- *Tightens the abdominal muscles*

2. Topic 2: MUSCLE GROUPS OF THE CORE REGION

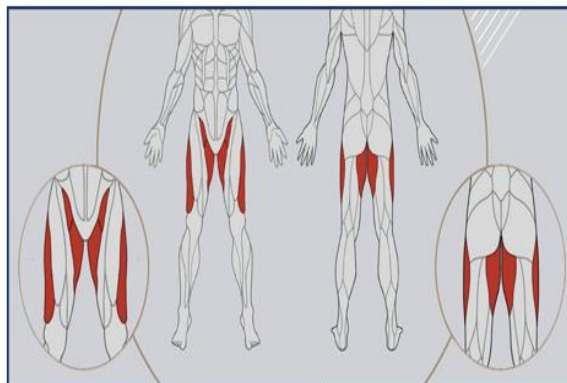


Figure 1: What Does Machine Abductor Do?.
(Source:OHO Fitness. ND. (Online))

Hip Abductor

This includes all the muscles in the body's midsection. These are the muscles in the medial section of the thigh called hip abductor.

Oblique Muscles

The oblique muscles are located along the sides of the body. This muscle is responsible in rotating movement of the body.

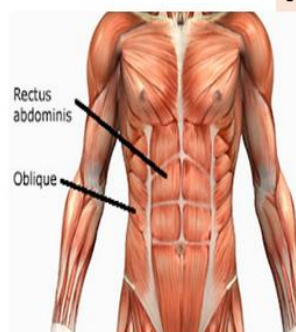


Figure 2: Rectus Abdominis Muscle Detail: 8 Packs Muscle
(Source: Vastral Physiotherapy Clinic. 2017:Online)

Rectus Abdominus

The rectus abdominis muscle is sometimes referred to as the "six-pack" which is vertically located on the anterior wall of the abdomen.

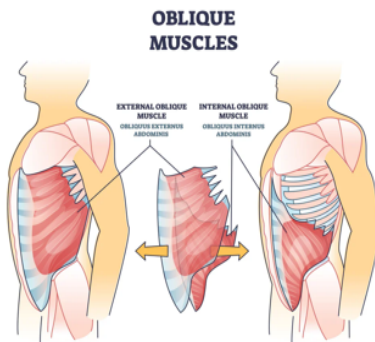


Figure 3: How to do Oblique Crunches (Form & Benefit)
(Source: The Steel Library, 2022:Online)

External Oblique

This muscle is also classified as flat muscle which is located inferior to the external oblique and above the transverse abdominal muscles.



Transversus Abdominis

This is situated under the oblique muscle of the body and it goes around the spine for protection and for stabilization.

Figure 4: Transversus Abdominis- The Golden Muscle!
(Source: The Pelvic Studio, ND:Online)

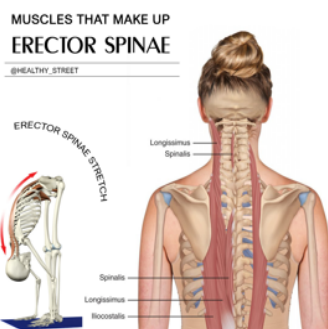


Figure 5: Muscles that make up the Erector Spinae
(Source: Kelehear, J. 2018: (Online))

Erector Spinae

The erector spinae is technically called back muscle which is composed of muscle group that is situated from the base of the skull down to the sacral region. They are also known as the sacrospinalis group of muscles

3. Topic 3: BASIC ACTIVITIES FOR CORE STABILITY

Crunches

- Lie down on your back with legs on a 90 degrees bent
- Place hands on chest or on nape to support the movement. Do not put stress on the neck during performance.
- Contract on the abdominal muscles, engaging the core muscle group while performing the crunches.



Figure 7: Photos owned by the author. In the photos is the author and her PE students and players.

Side Curl

- In a standing position, spread feet at a shoulder width apart.
- Place arms on the side of the body, maintaining the proper posture.
- Curl on the side reaching the side of the knee by the hand. Continue with desired number of repetitions.

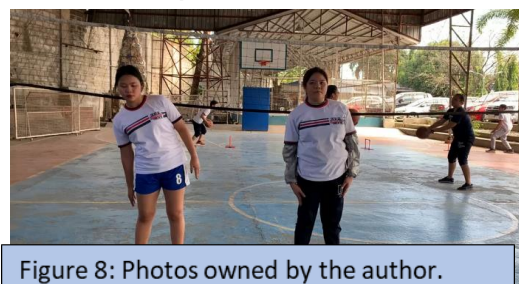


Figure 8: Photos owned by the author. In the photos are the author's PE students.

Modified Russian Twist

- In a sitting position, place legs in an 90 degrees position.
- Lean back a little and activate the abdominal muscles.



Figure 9: Photos owned by the author. In the photos is the author's PE student.

- Move the torso towards each side of the body, making center as the base in each movement.

Russian Twist



Figure 10: Photos owned by the author. In the photo is the author's son.

- In a sitting position, place legs in an 90 degrees position.
- Lean back a little and activate the abdominal muscles.
- Move the torso towards each side of the body continuously in each side while maintaining the reclined position of the upper body.

Plank

- In a prone lying position, keep the body on a straight alignment with elbows as the base.
- Engage the core muscles and maintain the position of the body while attaining the desired length of time of the activity.



Figure18: Photos owned by the author. In the photos is the author's co-teacher.

Shoulder Tap Plank



Figure19: Photos owned by the author. In the photos is the author's co-teacher.

- In a prone lying position, keep the body on a straight .
- Alternately tap each shoulder by the hand while maintaining the proper plank posture.
- Perform the desired repetitions.

Plank Jacks



Figure 13: Photos owned by the author.
In the photos are the author's players.

- In a push-up position, perform an open-close leg movement continuously.
- Keep the abdominal muscles engaged until the desired number of repetitions is achieved.

Leg Raise



Figure 15: Photos owned by the author.
In the photos is the author's PE students.

- Lie down on your back with legs on a straight but relax position.
- Engage the core muscles then raise both legs up and down.
- While performing, regulate the breathing process by inhaling before the leg raise and gradually exhale when lowering the legs.

Flutter Kick



Figure 16: Photos owned by the author.
In the photos is the author's co-teacher.

- Lie down on your back with legs on a straight but relax position.
- Perform the alternate kick with toes pointed.
- Avoid the heel of the feet getting contact with the floor.
- Engage the core for the entire performance.

Mountain Climber



Figure 18: Photos owned by the author.
In the photos is the author's PE students.

- In a push-up position, maintain the alignment of the body from head to toe.
- Alternately raise the knees close to the chest without compromising the proper alignment of the body.
- Do this in a faster pace without compromising the proper position of the body.

E. Conclusion

The core is composed of interconnected muscles and muscle group of pelvis, gluteus, hip and back muscles. These muscle groups are responsible for movements that are demonstrated to strengthen the core. They work together as a system to facilitate the efficiency and effectiveness of movement. The core plays a vital role in our daily movements since the base of the upper and lower extremities are articulated altogether.

E. References

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