

# United Martial Arts

10760 Hwy. 55 Plymouth MN 55441 763.551.1671

# Core Strengthening Exercises

# **Key Points:**

- Keep Spine in Neutral while performing exercises, and especially when issuing energy.
- You must be able to breathe easily in all positions and exercises. If breathing is restricted, you are tensing other muscles than the target group

# Pelvic Tilt/ Spine in Neutral

**Purpose**: To identify the muscles needed to place the spine in neutral and tilt the pelvis. **Initial Position**:

Lie supine (on back), with feet flat on the floor and knees bent.

- Flex your abdominal muscles, pulling the navel down towards the spine.
- Tilt the pelvis upward and in.
- Tilt the rib cage down and in.
- The whole spine, especially the kidney area should be flat on the floor.

Catalog this feeling. You will need to reproduce it when standing to put the spine in neutral/ tilt the pelvis. The muscles used to perform this action are the transverse abdominus muscles. They are the deepest layer of abdominal muscles, and will never show up on a body builder. Their sole purpose is to stabilize the spine.

### **Transverse Abdominal Muscles**

**Purpose**: To strengthen the Transverse Abs so that they can stabilize the spine and hold it in neutral position during all subsequent martial arts practice.

#### Initial position.

Keeping Pelvis tilted/ spine in neutral lift both knees to your chest. Extend you arms straight up over your chest.

- 1. Extend the arms over the head and extend 1 leg out parallel to the floor without letting the pelvis tilt forward.
- 2. Return both arms and leg to the initial position, and repeat for the opposite leg.

#### Variations:

- If this is too difficult, you can extend 1 arm or 1 leg at a time.
- You can extend and retract 1 arm and leg at a time
- If you want a real challenge, try doing both arms and both legs at the same time.

## **Gluteus Muscles (the backside)**

**Purpose:** To identify and strengthen the gluteus muscles; also to learn how to use these muscles without losing the neutral spine or arching the back.

#### Initial Position:

Lie on the back, with the feet flat on the floor. Knees are bent, and the pelvis is tilted back so that the kidneys are flat on the floor.

- 1. Bridge up the torso so that only the feet and shoulders remain on the ground. Take care that the back does not arch. Also, keep the feet soft.
- 2. Return to the initial position.

#### Variations:

- While in the up position, alternately extend each leg. Take care that the pelvis does not tip to one side when the leg lifts off the floor
- With one foot tucked on top of the opposite thigh, bridge as normal
- For a real challenge, keep one leg extended parallel to the floor, and bridge off of one leg at a time. Keep the foot relaxed.



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## Waist

**Purpose:** To identify and strengthen the waist muscles; also to learn how to use these muscles without losing the neutral spine or arching the back.

#### Initial Position:

Lie on the back, with the legs extended to the side, knees straight. The body resembles a capital "L". The arms are flat on the floor.

1. While tilting the pelvis back, smoothly lift the legs up into the air, and lay them down on the other side. Make sure that you do not jerk the legs upward. When you lay the legs down, let the whole body relax

#### Variations:

If the above is too difficult, the same exercise can be done with knees bent.

#### **Back Extensor Muscles**

**Purpose:** To identify and strengthen the back extensor muscles; also to learn how to use these muscles without losing the neutral spine or arching the back.

#### **Initial Position:**

Lay flat on the stomach. Extend the arms and legs out to the corners so that the body resembles the letter "X"

- 1. Tilt the Pelvis back, putting the spine into neutral
- 2. Lift the opposite side arm and leg off the floor, without arching the back. Hold.
- 3. Repeat for the other side arm and leg. Hold.
- 4. Lift both legs at the same time. Hold.
- 5. Lift the arms and chest at the same time. Hold.
- 6. Lift all 4 corners and hold.
  - In class, we hold for 10 seconds. Each position may be held for any length of time desired.
  - Take care that the transverse abs stay engaged, and the back is not allowed to arch at any time.

# Hu Yin (An acupressure point located in the perineum.)

**Purpose:** To identify and strengthen pelvic floor muscles. These muscles are used in certain meditation exercises, and ultimately in all internal martial arts. Strengthening them can also prevent or treat incontinence and prostate issues, as well as easing childbirth. These exercises are commonly known as "Kegel" exercises.

- 1. While urinating, contract the pelvic muscles and stop the flow.
- 2. When you have it arrested, relax and begin again.
- 3. Repeat several times if possible.
  - Try to cut off the flow as sharply as you can
  - Try to urinate strongly between contractions.
  - Try not to flex any other muscles in the area, such as the stomach, legs or anus.