

# **Strong Core Smooth Swimming**



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Demonstrations by Sharon Johnson – NE Tri Training**

# What do these great swimmers have in common?

- Good swim posture
- Smooth aquatic line
- They carry their core long and lean

# What is good swim posture?

- Neck long and extended, chin tucked in
- Shoulder up when arm extended
- Abs engaged, but ribs down
- Neutral spine, no arch

# Why Core Strength?

- You need core strength to maintain good swimming posture.
- Good swimming posture is compact and streamlined.
- With good posture, you move through the water like an aquatic creature.

# Why Use a Roller?

- Challenges you to maintain core stability while performing swimming-like movements.
- When you swim, penalty for not maintaining stability is that you create more drag and swim more slowly – it is not always obvious.
- With the roller, if you fail to maintain core stability, you fall off! Much easier to detect!

# Pelvic Tilt on Roller

- Arch your back.
- Press spine flat.



- Check pelvis orientation with your hands
- Tilt and arch (spill water toward feet)
- Press flat (spill water towards head)

# Double Arm Movement

With spine neutral, slowly lower both arms over head.

Then raise both arms together.



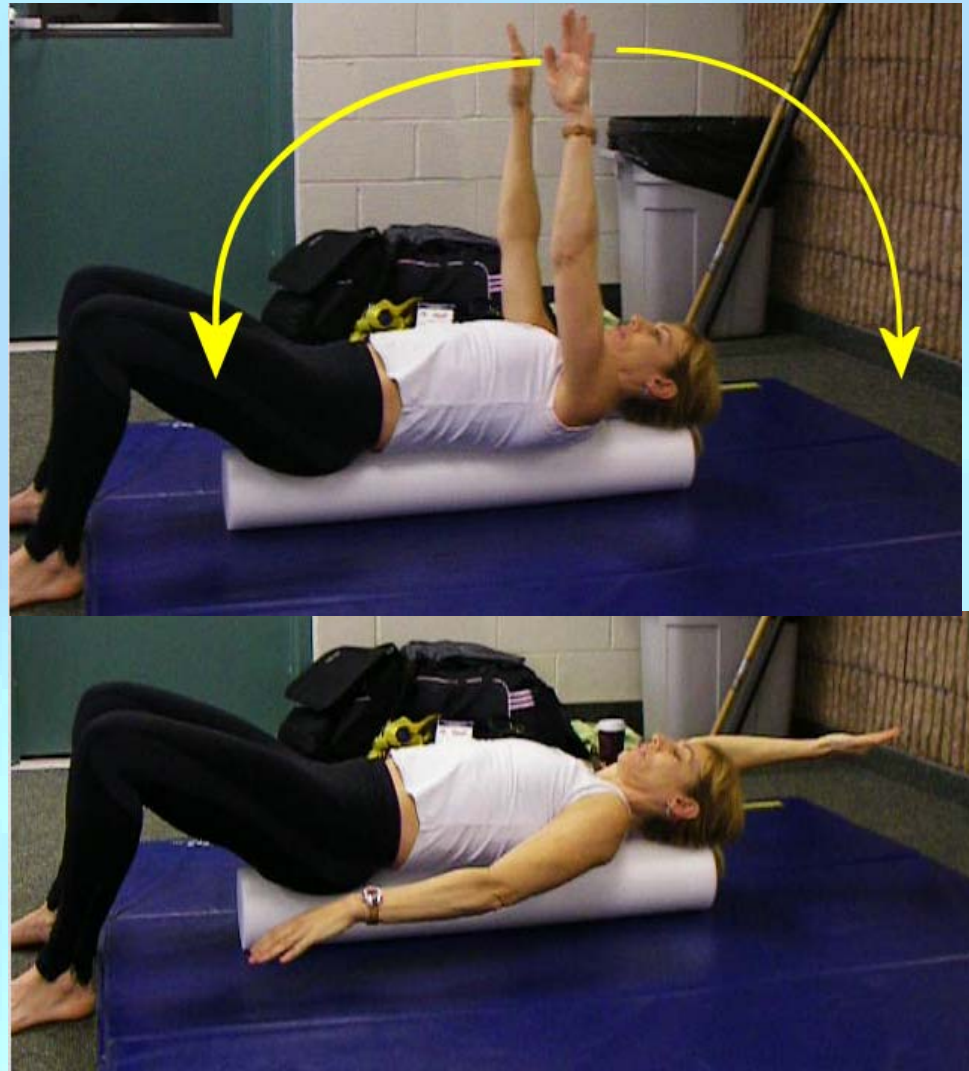
# Double Arm Movement - Video



# Opposing Arm Movement

With spine neutral, slowly lower one arm overhead, and the other arm towards the feet.

Then slowly move arms through 180 degree arc in opposite directions.



# Opposing Arm Movement -Video



# Butterfly Movement

With spine neutral, hands over forehead, open chest and lower elbows towards the floor.



# Butterfly Movement - Video



# Single Leg Raise

With spine neutral, raise one leg, hold, then lower.



# Single Leg Raise - Video



# Single Leg Raise with Arms Raised

With spine neutral, hold both arms up, raise one leg, hold, then lower.

When comfortable, alternate legs.



# Single Leg Raise with Arms Raised - Video



# Leg Raise with Opposing Arm Movement

With spine neutral, raise one leg, while lowering same arm to the side and the opposite arm over head.



# Leg Raise with Opposing Arm Movement - Video



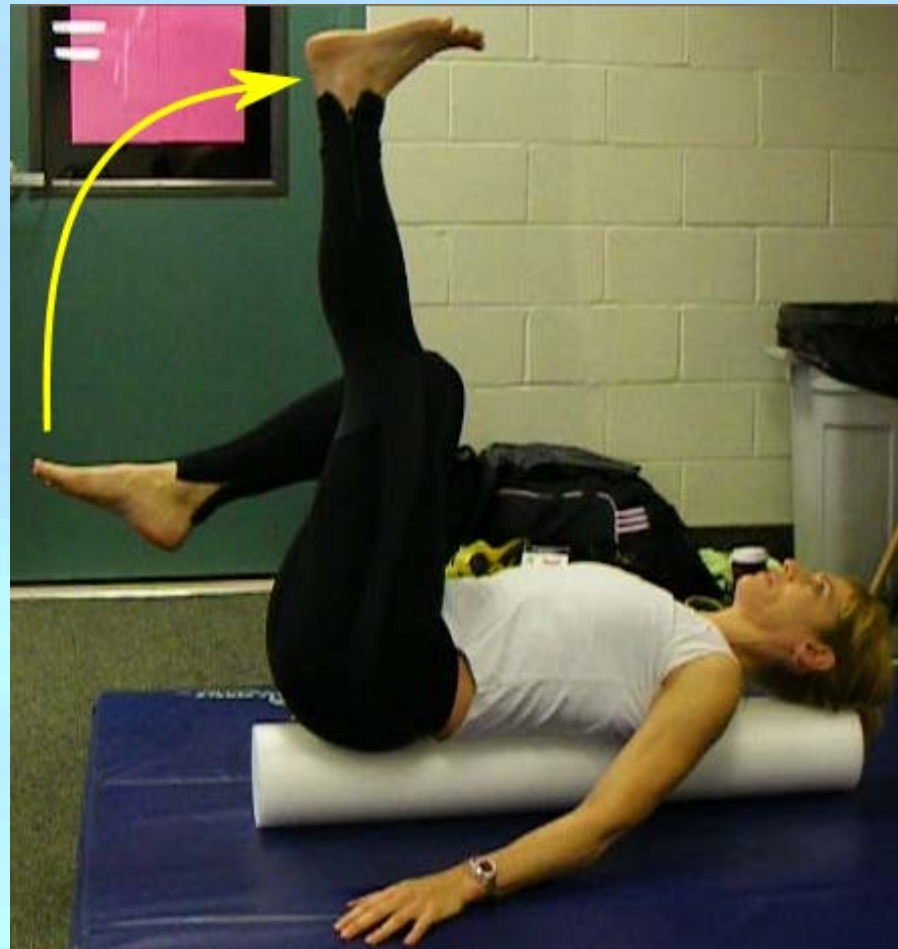
# Both Legs to Table Position

With spine neutral, feet on floor, raise both legs until shins are horizontal. Maintain balance. Lower slowly.



# Leg Raise from Table Position

With spine neutral, feet on floor, raise both legs to table position. Slowly raise and lower alternate legs.



# Leg Raise from Table Position - Video



# Crunch

With spine neutral, arms overhead, bring arms in arc to hips, and crunch...  
(cont.)



## Crunch (cont.)

Continue raising arms until you reach crunch position. Holding arms vertical, lower back – one vertebra at a time – onto the roller. Then lower arms to start position overhead.



# Crunch - Video



# Sit-Up - Video

Like the crunch, but full sit-up...



# Side Plank with Arm Extension

Begin in side plank position, supported on elbow, upper arm resting on side.

Bring upper arm in an arc to overhead position (see below), hold, and then return to side.



# Side Plank with Arm Extension - Video



# Raised Side Plank with Arm Extension

Start in raised side plank position.

Sweep the straight upper arm in an arc from the side to over the head.



# Raised Side Plank with Arm Extension - Video



# Leg Kicks – Leg Raises

- Work back of legs and buttocks
- Provide stretching to the front of your thighs
- Gentle stretch to upper back and shoulder area

# Side Kick - Video



# Reverse Leg Raise

Lie face down. Raise both legs slowly. (Thighs are off the mat.) Lower and repeat.

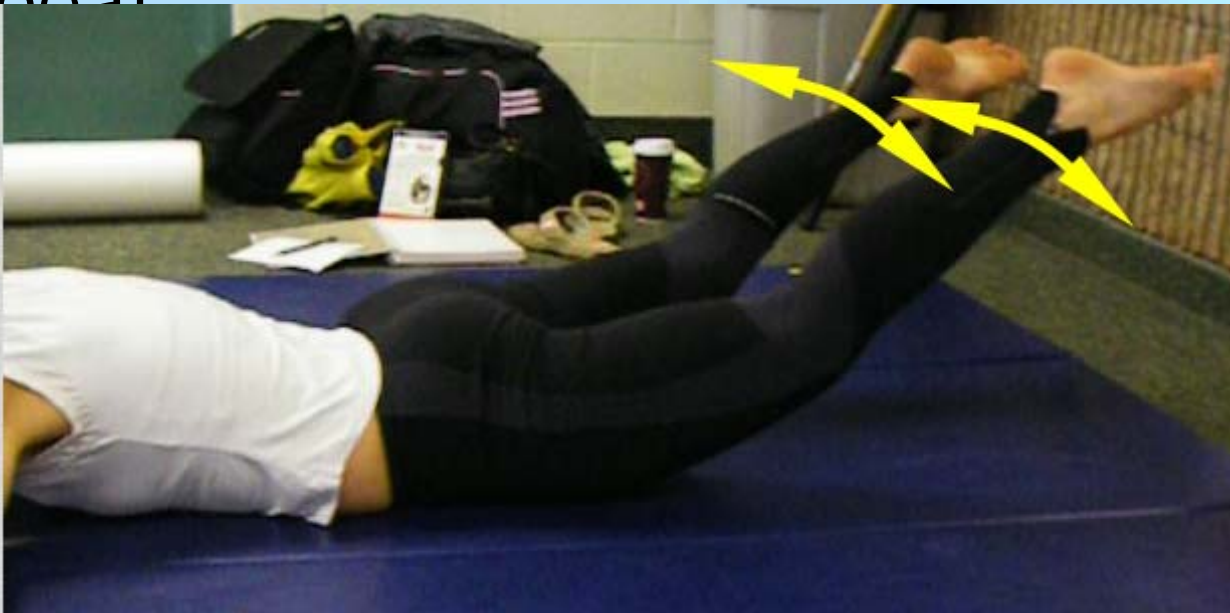


# Reverse Leg Raise - Video



# Reverse Leg Raise – Kick Apart

Lie face down. Raise both legs slowly. Spread legs apart, close together, repeat



# Reverse Leg Raise – Kick Apart - Video



# Reverse Leg Raise – Hamstring Curl

Face down,  
raise thighs  
off of mat.  
Then curl to  
vertical.  
Lower  
slowly and  
repeat...



# Reverse Leg Raise – Flutter Kick

Lie face down. Raise both legs slowly. Flutter kick...



# Reverse Leg Raise – Flutter Kick - Video



# Leg Pull

- Strengthen abs, lower back, upper body, legs, and arms
- Improves balance and stability

# Leg Pull

Back  
straight.  
Raise leg  
straight up.  
Alternate  
legs.



# Leg Pull - Video



# Downward Facing Dog

Back straight.



# Prayer



# Swan

Begin face down in push-up position. Push upper body upward slowly, leaving thighs on floor and arching back. Look up.



# Questions?

Q. How many repetitions?

A. Maybe two sets, 10-12 repetitions. It actually depends. You want your body to experience a challenge on each of these exercises. Your body gets stronger, more flexible, or quicker by adapting to the challenges that it experiences.

Q. How often?

A. Three times a week. Or, break up the routine and do the roller exercises one day, mat exercises the next.

Q. Should we be doing any other strength or flexibility training in addition to these exercises?

A. Generally speaking, any routine that emphasizes core strength and flexibility (Pilates or Power Yoga, for example) will help. These do not have to be extensive routines – our bodies can experience challenges very quickly!