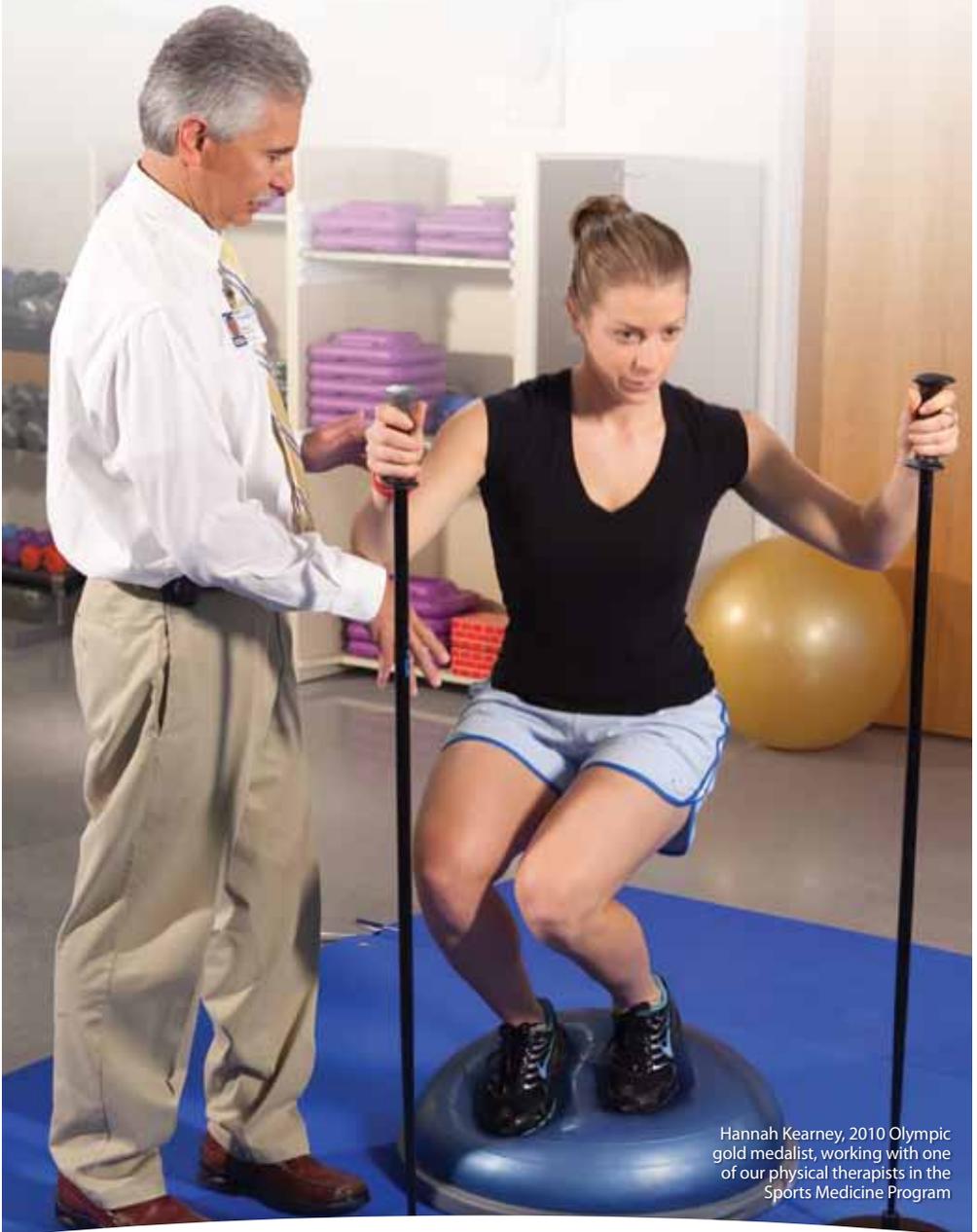


# Dynamic Stretching for Athletes



Hannah Kearney, 2010 Olympic gold medalist, working with one of our physical therapists in the Sports Medicine Program

# Static vs. Dynamic Stretching

## Static

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- Body stays in one position
- 30-45 second hold
- Usually targets one muscle group
- Best for after exercise during cool down
- Example: reaching forward to touch toes for 30 seconds

## Dynamic

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- Body is in motion
- Short 2-3 second hold
- Targets multiple muscle groups
- Complete during warm up
- Example: straight leg march (see stretch examples)

## Facts about dynamic stretching:

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- prepares your body for exertion and sports performance
- should be specific for your sport to prepare the muscles
- has been shown to increase range of motion, blood and oxygen flow
- should be completed in comfortable range of motion – if you push too hard, you could cause an injury
- shown to improve sprint performance, agility performance, and power (compared to static stretching)

## Stretching recommendations:

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1. Complete **warm up** prior to sports/activity which includes **dynamic** stretching
2. After exercises, complete **cool down** to include **static** stretching for muscles



# General Dynamic Stretches

While walking forward, complete each of the following 5 times on each side, holding each repetition for 2-3 seconds:



## Walking quad stretch

Stand straight, with your legs together. Bring one heel toward your buttocks and hold the ankle with your hand. Keep your back straight (do not arch your back). Step forward and stretch the opposite leg.



## Knee to chest

While walking forward, pull the right knee up to your chest as high as possible and hold with your hands. Take a step forward and complete with the left leg.



## Walking lunge

Lunge forward with one leg by bending both knees and keep your trunk upright. Keep moving forward and repeat on the opposite leg. Make sure your knee is stable during the lunge – keep the knee over the foot – don't let the knee fall inward.



## Straight leg march

Kick one leg straight out in front of you, with your toes flexed toward the sky. Repeat with the opposite leg.



## Crawl stretch

Stand straight, with your legs together. Bend over until both hands are flat on the ground (try to keep your heels on the floor). "Walk" forward with your hands until your back is straight and parallel with the floor. Keeping your legs straight, "walk" your feet toward your hands. Repeat by "walking" your hands forward again.



## Cradle hip walk

While walking forward, pull right foot up and inward toward left waist, rotating the knee outward. Grab the right ankle with your left hand and if tolerated, push the knee downward with the right hand (to increase stretch). Keep upper body straight.

# Sport-Specific Dynamic Stretches

## Skiing

Standing trunk rotation  
Standing hip swings

## Ice Hockey

Under the fence  
Backward lunge with pop up

## Basketball

Walking lunge with twist  
Walking lunge with back bend

Complete each exercise 5 times on each side, holding each repetition for 2-3 seconds.



## Standing trunk rotation

Stand bent over at your waist while hold one pole in both hands. Twist your upper body to the left side and look up at your raised left hand. Do not twist your hips. Repeat, twisting to both sides.



## Standing hip swings

Stand with hands on your ski poles. Swing the right leg forward and in front of you. While swinging your leg, turn your foot inward. Then swing your foot behind you and to the side while turning your foot outward. Keep your back as straight as possible and try not to turn your body.



## Under the fence stretch

Stand straight, with your arms at chest level. Complete a side lunge while holding hands out in front of you. Repeat with a side lunge to the opposite side. Keep your knee over your toe (do not let the knee fall inward) and do not let your knee bend beyond your foot. Return to standing.

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### Backward lunges with pop up

Lunge backward with the right leg by bending both knees and keeping your trunk upright. Make sure your knee is stable during the lunge – keep the knee over the foot – don't let the knee fall inward. Then bring your right leg forward and up toward your chest while "popping" up on your left toe. Repeat with the left leg.

### Walking lunges with twist

Stand straight, holding your arms out straight with basketball. While walking forward, lunge forward with one leg, bending both knees and keep your trunk upright. Twist your upper body to the opposite side of the front leg. Return to standing and repeat on the opposite leg with twist to the opposite side. Make sure your knee is stable during the lunge – keep the knee over the foot – don't let the knee fall inward. Keep your arms elevated (to chest height).



### Walking lunge with back bend

With the lunge discussed in the general stretch section, add a backward bend while holding a basketball. Lunge forward with one leg by bending both knees. While holding the basketball, reach overhead and backward by arching your back. Repeat on the opposite leg, again arching backward. Make sure your knee is stable during the lunge – keep the knee over the foot – don't let the knee fall inward.





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