

# Pain-free knees, please!



Sore knees are your biggest workout woe, according to a Self.com poll. To protect your patellae and remove the ouch for good, try this three-step prevention plan designed by Lisa Callahan, M.D. (left), codirector of the Women's Sports Medicine Center, and exercise physiologist Polly de Mille, both of the Hospital for Special Surgery in New York City. Do the moves two or three times a week, before a workout (so your knees aren't already achy) or on an off day. Think of it as prehab, Dr. Callahan says, so your knees never need rehab! By Bari Lieberman



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## 1 BOOST HIP STRENGTH

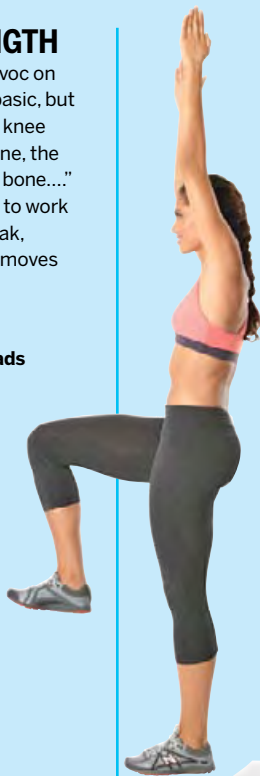
Weak hip muscles wreak havoc on knees. Why? It may sound basic, but the kids' song was right on: "The knee bone's connected to the thighbone, the thighbone's connected to the hip bone..." It's a three-man team that needs to work in concert. If hip muscles are weak, kneecaps bear the brunt. These moves will bolster every hip muscle.

### ◀ Monster walk

**works hip abductors, glutes, quads** Wrap a circular resistance band above ankles, and stand with feet shoulder-width apart, knees slightly bent, hands on hips (as shown). Step to right for 15 seconds, keeping feet under hips and not touching each other. Reverse direction for 15 seconds; repeat.

### ▼ Window washer

**works hip rotators, hip abductors, glutes** Lie on right side about 6 inches from a wall, head resting on outstretched right arm, left palm on floor in front of chest for balance, bottom leg bent. Extend top leg back so sole of foot lightly touches wall (as shown); slowly glide foot down 2 feet, then back up for 1 rep. Keep lower back flat, and let movement come from hip, not waist. Do 15 reps. Switch sides; repeat.



## 2 FIX IMBALANCES

When one leg is weaker than the other, there can be increased pressure on the weaker leg's knee. Because you have to work one leg at a time, the following move helps you build equal power in both legs' quads and hamstrings, the two muscle groups that directly support your knee joints.

### ◀ Single-leg dead lift

**works quads, hamstrings** Start with right knee bent 90 degrees in front of you, left knee soft, arms extended overhead (as shown). Slowly lower torso until parallel to floor as you extend right leg behind you. Return to start; do 10 reps. Switch sides; repeat.



## 3 LOOSEN UP

Your knee joint is a hinge, and tight hips, hamstrings or quads limit how far it swings. When that happens, stress isn't evenly distributed across the entire joint, placing undue wear and tear on a single area. Try the stretching series below to relax stiff muscles.

### ▲ Sweet-relief stretch

**releases hip flexors, glutes, quads, hamstrings** Lie on floor faceup, and place a foam roller (\$25; Spri.com) under butt perpendicular to body, feet on floor, knees bent. Hug right knee to chest, foot flexed. Extend right leg toward ceiling. Slowly move right leg across torso, reaching toward left until you feel the stretch in right hip (as shown). Return to start; repeat. Do 3 reps; switch sides.