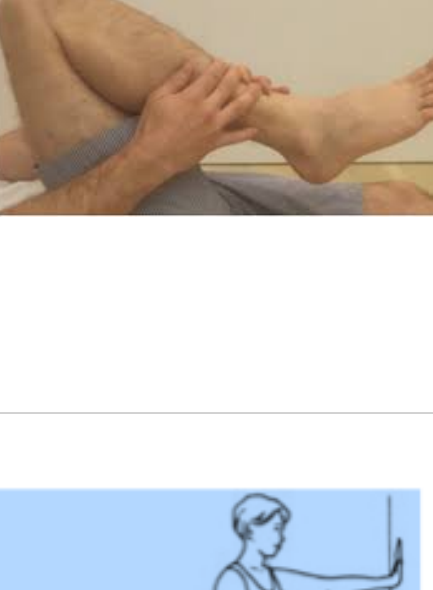

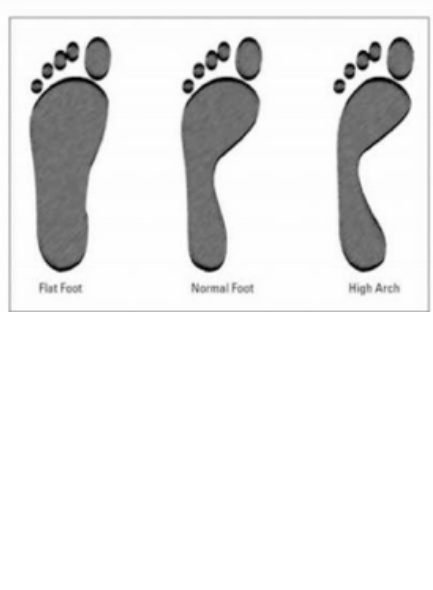

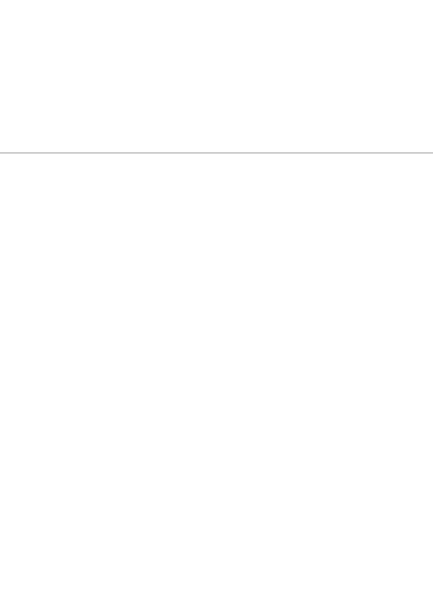



	Knee Tests	
	Range of Motion	All these range of motion tests are great stretches that can be done daily for 1 or more sets for 30-45 second hold
Gluteal	When seated with ankle on top of opposite knee is your shin almost parallel with the floor or within 30 degrees? Are both sides the same and is there no pain? To test it further bring your chest forward. You chest should be within a few inches of your knee.	
Hamstrings	While lying on your back raise a straight leg up as far as you can keeping it straight and determine the angle from floor (repeat to other side). Do both legs come up to 60 degrees? Are both sides the same? Is there no pain? Normal range of motion is 70 to 80 degrees. If you are less than this work on improving this number.	
Hip Flexors	While lying on your back keep back in neutral (in other words do not allow it to flatten out) and pull one knee into your chest and examine what happens to the other leg (do this to other side). Does your opposite leg stay on floor? Are both sides the same and is there no pain? If the straight leg comes off the floor it most likely means you have tight hip flexors.	
Prone Knee Flexion Test Movement Screen	Can you while lying flat on your belly bring your ankle into body with some assistance where the heel comes close to touching the buttocks? Are both sides the same and is there no pain? If you have pain when doing this test seek medical attention. Side note: From this position you should be able to lift your knee off ground 1-3 inches (test of tightness rectus femurs). <i>Prone Knee Flexion Test (PKFT)</i>	
Supine Knee Flexion Test Movement Screen	Can you while on lying on back bring knee into chest with some assistance the thigh should be able to touch the chest and ankle should be able to touch back of leg or come with a couple inches? Are both sides the same and is there no pain? If you have pain when doing this test seek medical attention. <i>Supine Knee Flexion Test (SKFT)</i>	
Quadriceps	While standing and holding onto something for support try to grasp ankle and bring to buttocks (do this to other side). Can you almost touch your heel to your buttock and do you come within a couple inches of your buttocks? Are both sides the same and is there no pain?	
IT Band Screen	Do you have pain doing the IT Band Stretch? Many people tend to have tightness along the side of the leg. Try this stretch. Sideways to wall or or other support hold and push rear legs hip towards wall. Should feel stretch along entire leg, hold for 30 seconds.	
Calves	The Wall (Lunge) Test is a very important test. Standing facing 6 inches from wall try to touch a knee to wall while keeping foot flat (do this to other side). Can you touch your knee to the wall while keeping foot flat? Are both sides the same and is there no pain? Limited ankle range (especially ankle dorsiflexion-where your foot bends up towards your shin, like at the bottom of a squat) affects many of our everyday movements and activities, such as squats, climbing down stairs, landing from and jump, and even walking. This test easily shows whether you are at risk of lower limb injury. It is very reliable and accurate, even when done by novices, and it is one of the most common tests used in Physiotherapy.	
	Muscular Ability	All these tests are great muscle building exercises that can be done daily for 1 or more sets for 10 or more reps
Wall Squat Hold	Can you do a wall squat for over 100 seconds for men and 60 seconds for women? How to do it: Start by standing and leaning against a smooth wall. Slide down the wall and walk your feet forward until your knees are at a 90-degree angle. Keep your back flat against the wall. Make sure your heels stay down on the ground.	
Step Up and Down Test	Can you do > 49 step ups and downs off a standard stair in one minute (if over 50 yrs old make that 40 steps)? How to do it: Standing in front of a standard first step on a staircase (7 to 8") do as many step ups and downs in one minute. One repetition is one complete cycle of both feet coming up and both feet touching down. You can do this move on your own staircase or on a 7-8 inch aerobic step.	
Bodyweight Squat Test	If female can you do a body weight squat for >24 reps if 20-30 yrs old, >21 reps if 30-40 yrs old, >18 reps if 40-50 yrs old, and >15 reps if 50-60 yrs old. If male can you do a body weight squat for >30 reps if 20-30 yrs old, >27 reps if 30-40 yrs old, >24 reps if 40-50 yrs old, and >21 reps if 50-60 yrs old.? How to do it: When performing the squat you should be able to make a 90 degree angle at your knee. Your knees should stay shoulder width apart and not go beyond your toes. Use a steady pace, not faster than a 2 count down and a 1 count up.	 https://www.acefitness.org/education-and-resources/lifestyle/exercise-library/135/bodyweight-squat/
Bodyweight Lunge	Can you do a standard lunge for >18 reps if 20-30 yrs old, >16 reps if 30-40 yrs old, >14 reps if 40-50 yrs old, and >10 reps if 50-60 yrs old. How to do it: Lunge Form: Keep your upper body straight, with your shoulders back and head up. Always engage your core by bracing your abdomen. Step forward with one leg, lowering your hips until both knees are bent at about a 90-degree angle. Make sure your front knee is directly above your ankle, not pushed out too far or to either side, and make sure your other knee doesn't touch the floor but comes 1-3 inches from floor. Keep the weight in your heels as you push back up to the starting position. Use a steady pace not faster than a 2 count down and a 1 count up.	
Lateral Standing Leg Lift	Can you hold a lateral leg lift for >30 seconds if < 40 yrs old, if older can you hold it for 20 secs. How to do it: Standing lateral leg lift form: Keeping a long straight torso, bring one leg out to the side as high as you can and hold for as long as you can.	
Side Lying Lateral Single Leg Lift	Can you do 20 side lying lateral leg lifts? Keeping your leg locked and straight you should be able to perform 20 single leg lifts up to 45 degrees without stopping. If not you need to strengthen your quadriceps and hip flexors.	
Supine Single Leg Lift	Can you do 20 single supine leg lifts? Keeping your leg locked and straight you should be able to perform 20 side leg lifts up to 35 degrees without stopping. If not you need to strengthen your side glutes.	
Glutei Hip Extension Test	Can you do a proper Prone Hip Extension? Lying prone lift one leg up. You should be able to lift it up 10 or more degrees. When doing note the muscles engaged. Proper movement should come first and primarily from the gluteals with minor low back and hamstring involvement in that order. If not you may have weak glutes. You need to strengthen your glutes.	
Dorsiflexor Test	Do you have good dorsiflexor endurance? A good level of dorsiflexor endurance is being able to do 15-20 reps of dorsiflexor lifts.	
Plantarflexor Test	Do you have good plantarflexor endurance? A good level of calf endurance is being able to do 15-20 reps of single leg calf plantar flexion lifts.	
	Other Tests	
BMI Body Mass Index	What is your BMI? It would be great if it was below 30. The lower your body weight typically the better when it comes to knee as well as overall health. See test at https://www.diabetes.ca/managing-my-diabetes/tools---resources/body-mass-index-(bmi)-calculator	
Feet	Do you have flat feet? Understanding your feet is important when it comes to knee health especially if you run. Standing shoulder width apart look down at your feet. Does there seem to be an equal size arch on each foot and does the second toe line up with the knee cap; this is considered normal. If the arch drops where it is flat to the ground then you may have flat feet (no arch-pes planus). Opposite to this is where there is a high arch; where you feel the weight of your body on the outer aspect of the foot (high arch-pes cavus). Both conditions make you more susceptible to injury. Look at your arch while you walk and run as well. You could also do the wet test - where you wet your feet and look at what the imprint shows. Your foot should look like the one in the middle in diagram to the right.	
Knee Posture	Do your knees knock or bow out? Unfortunately if you have bow legs or knock knees you may be at higher risk for injuries during high-impact exercise like aerobic dance and running type sports. Knees that deviate from the norm (either in or out) can put added strain on the joints of the entire lower body and even the upper body, especially the hips, knees, lower legs, ankles, and feet. The norm is where the when standing shoulder width apart the knee sits over your feet. Someone who has knock knees will often pronate (the ankles and feet roll inward too much), while if bow legged person is more likely to supinate (the ankles and feet roll out). If you have either condition you may be a good candidate for an orthotic. A physical therapist or podiatrist may prescribe inserts or a modified exercise program. If you have pain while running you should try a lower impact sport, such as swimming or cycling or modify your running program. Make sure you have good shoes. If you have foot or knee issues get the right shoes - you may need motion control shoes.	
	Does your patella (knee cap) track right? Do they have good mobility? Normal knee cap motions is when the knee moves without hindrance in a superior and inferior direction during extension and flexion, respectively. Improper tracking is when this motion does not occur, when there is a restriction in motion, or when the knee tracks in a lateral or medial direction during extension. All of which can lead to pain and loss of function. One of the easiest ways to understand knee tracking is to move the knee manually. This is typically done at rest with the leg extended. With a fully extended and relaxed leg try to move the knee cap superior and inferior manually. Note if there are any restrictions. Now watch the knee cap move when the leg is tightened. Normal motion would be up and down with no deviation or pain. An easy solution is to perform patella mobility on the knee when the leg is fully extended and relaxed. Move the patella superior and inferior gently. Try doing this several times. Try to have excursions of several millimeters. If you finding too much tightness massage out the front of the quadriceps above the knee joint. Also, try foam rolling the quadriceps (ask a trainer on how to do this). After doing this stretch the quadriceps and then repeat the process. The knee cap should also be movable in the lateral and medial direction a few millimeters with no pain.	
Knee cap Crepitus (noise) Test	Does your knee cap make noise when it moves? Try the Knee cap Crepitus Test- a positive sign is where there is a grating sensation when there is pressure applied to the top of the patella during tightening of the quadriceps muscle on a fully extended leg. If it makes noise and there is no pain you need to work on conditioning around your knee cap. If there is pain talk to your doctor you may need therapy.	