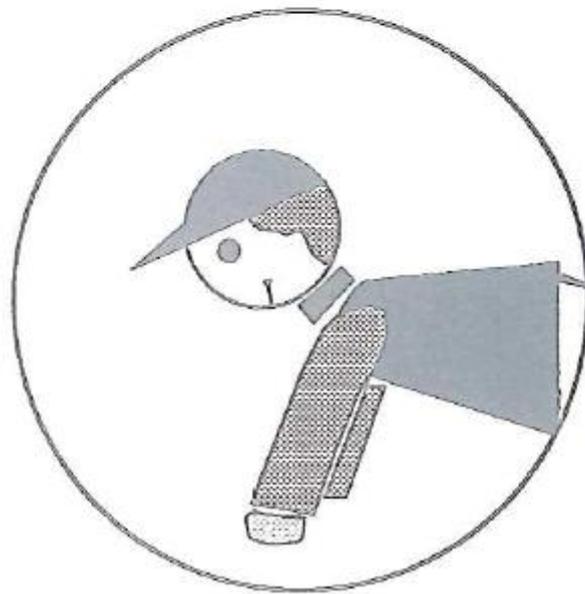


HAMSTRING REHABILITATION PROGRAMME





Your hamstring muscles lie on the back of your thigh. If you grab the back of your thigh with your hand, you are holding the “meat” of the Hamstring muscles. They give you the muscle power to bend your knee with force. There are four Hamstring muscles: Semi Membranosis, Semi Tendinosis, and two heads of Biceps. The Hamstring muscles are in balance with the quadriceps muscles normally at a ratio of 1:1.3.

At higher speeds (sprinting) the ratio approaches 1:1. If this ratio is abnormal the Hamstring is more liable to injury. Hamstring weakness is therefore a major cause in new injury and recurring injury. An isokinetic dynamometer is a scientific way of evaluating the strength of balance of these muscles.

Stretches:

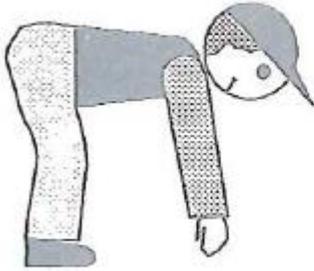
The Dugout Stretch



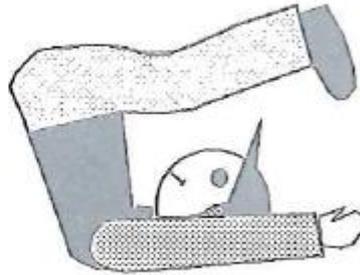
Put your leg out straight on a table. Reach out slowly with both hands and touch the toes of the elevated leg. Hold for 3 seconds. Repeat at least 10 times.

Hamstring Stretches

Hamstring Stretches



Toe Touch



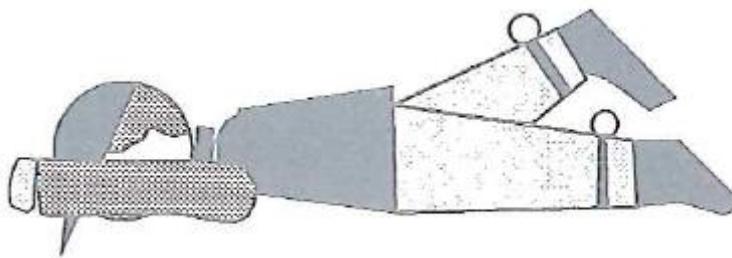
Plow

Aim only for functional length

Resistance Exercises:

Phase 1.

To strengthen your Hamstring muscles you must lie face down on the floor or on a firm table. Strap a weight boot to your street shoe or use an ankle weight. Begin with two pounds. Your hamstrings are not as strong as your quadriceps muscle on the front of your thigh. Starting with your leg out straight, bend your knee to ninety degrees. This makes your lower leg perpendicular to the floor. Take three full seconds to get there: 1000-1, 1000-2, 1000-3. There is no need to hold this position more than just a moment. Then let your leg down to the straight position again. Do this to a 3-second count.



Phase 2.

Now you are ready for a full progressive resistance program. First to 10 reps (repetitions) of this exercise with one-half maximum weight. Rest 5 minutes. Next to 10 reps with three-quarters maximum weight. Rest 5 minutes. Finally, do your last set of 10 reps with maximum weight.

Phase 3.

If you are trying to gain strength, you should do these exercises 3 times a week. If you are coming off an injury or surgery, you should do them daily until the injured leg is as strong as the normal leg.

Phase 4.

Add 2 pounds every 5 to 7 days. Never use weights that are so heavy that you cannot finish the exercise.

Strengthening Exercises:

To strengthen the Upper Hamstrings



Attach a bicycle tube firmly to the post of a door so that the bottom of the tube is six inches above the top of your knee when you are seated in a straight chair.

Put the leg closest to the tube through it so the bottom rests under your thigh.

Forcefully lower your foot to the floor, then relax. Repeat rapidly 10 times. Rest 30 seconds. Repeat procedure 5 times. Repeat with other leg.

To strengthen the Lower Hamstrings

Fasten one end of the bicycle inner-tube to a stationary object such as a door knob.

Sit down and put one leg through the other end as pictured in the diagram below. The tube should be tightly stretched.

Bend the knee backward rapidly 10 times increasing tension on the tube. Rest for 30 seconds. Repeat the procedure 5 times. Repeat with the other leg.

