

# **A Training program to Prevent Knee Injuries and Enhance Athletic Performance**

## **#1 DYNAMIC WARM UP**

- ❖ 5 minutes of low intensity aerobic activity (jogging, bicycle, stepper, etc.)
- ❖ Arm swings (5 reps each direction)
- ❖ Knee and ankle rotations (5 reps each direction)
- ❖ Hip swings (forward and backward and side to side)
- ❖ Heel walks and toe walks (20 each)
- ❖ Lunge walking with wide arm rotation, lunge walking with tight arm rotation, lunge walking with side to side bending, lunge walking with figure 8's. ( each performed for 20 feet)

## **#2 PLYOMETRIC WORK-OUT**

See Training Program

## **#3 STRENGTH TRAINING PROGRAM**

- ❖ **Upper Body....All performed 3 x 10 reps. 20 to 30 seconds rest between sets. Use 3-5- lb. dumbbells.**
  - ....standing shoulder external rotation
  - ....standing dumbbell shoulder flexion/extension
  - ....standing dumbbell shoulder lateral raises
  - ....standing dumbbell bicep curl to overhead press
- ❖ **Iso Core Exercises....all holds for 20-60 seconds, depending on your strength. Start with 20 seconds and add about 5 seconds per week.**
  - ....on your stomach and elbows
  - ....on your back and elbows
  - ....on your right side and elbows
  - ....on your left side and elbows
- ❖ **Legs....follow indicated repetitions for each exercise.**
  - ....double leg squat (20reps in 20 seconds) ..... rest 45 seconds
  - ....single leg squats (10 reps on each leg, progress to 3 x 10 reps on each leg).....rest 25 seconds
  - ....STAR reaches with arms (3 times at each position, progress to 5 times)...use 3-5 lb. dumbbell, rest 45 sec.
  - ....forward step single leg squat (5 per leg alternating, progress to 10 per leg)
  - ....side step single leg squat (5 reps per leg alternating, progress to 10 per leg)
  - ....90 degree rotation single leg squat (5 reps per leg alternating, progress to 10 per leg)
  - ....balance walking lunge forward (50 feet)....hold 2 seconds each step
  - ....balance walking sideways (50 feet).....hold 2 seconds each step

## **#4 POST EXERCISE STRETCHING**

- ❖ Gastrocnemius.....30 seconds each leg
- ❖ Soleus.....30 seconds each leg
- ❖ Quads.....30 seconds each leg
- ❖ Hamstrings.....30 seconds each leg (no hurdlers position)
- ❖ Hip.....30 seconds each leg
- ❖ Posterior Shoulder.....30 seconds each shoulder
- ❖ Posterior arm.....30 seconds each arm
- ❖ Overheard reach.....30 seconds each arm



