Health, Strengths And Limitations

My client has recently suffered from a broken leg and undergone physical therapy. Now that the doctor has allowed for normal physical activity to resume he can begin to rebuild his strength in his leg. His one strength is that he can walk on level surfaces. His main limitations are lack of mobility in the ankle and knee.

Client Skill Evaluation

My client's skill related fitness levels were very weak due to weeks of inactivity while his leg was recovering. He could not hold a stork stance (balance) at all, but he could do two floor to knuckles (lifting an object from the floor to the table (power)) before his leg gave out. His coordination was also relatively low as he couldn't do tandem walking (also known as balance beam walking) for more than five seconds at a time without falling over. When he was tested on cone walking for agility it was discovered that he could cone walk fairly well as he made it through the ten cones in two minutes. His reaction time and speed were both really low because he could not perform a side shuffle throw or walk on a treadmill for more than three minutes.

Physical Challenges

My client's challenges include walking upstairs, walking the dogs, practicing soccer with his son, and carrying heavy boxes at work. To improve upon these he needs to work on his agility and reaction time to play soccer with his son, his balance and coordination to be able to carry heavy objects at work, his power to walk upstairs, and his speed to keep up with the dogs when walking them.

Exercises

He needs to improve in all the areas of skill related fitness to be able to resume a normal and healthy lifestyle. Below are the exercises I have prepared to help him regain a normal range of motion. My client should choose at least two from every category to work on every weekday. The client will gradually increase the length of time he does these activities and the difficulty level of the activity: this could be the speed at which the treadmill is moving, the surface on which he is tandem walking, the weight of the object when doing floor to knuckles and knuckle to shoulders, etc.

Power

Squats/Lunges
Box Steps
Floor to Knuckle
Knuckle to Shoulder

Balance

Single Leg Stance (Eyes Open) Single Leg Stance (Eyes Closed)

Tandem Stance (To add variety to the routine do this stance on different surfaces.)

Coordination

Stork Stance While Throwing the Ball at the Rebounder Tandem Walking

Agility

Cone Walking Agile Square Jumps

Reaction Time

Soccer Drills
Side Shuffle Throw

Speed

Treadmill (Increasing Speed)
Treadmill (Walking Backwards)
Treadmill (Karokes)
Stationary Bike

SPORT and FITT Principles

This training program was designed using the SPORT and FITT principles:

S for Specificity

The client has to do specific exercises to help improve in the skill related fitness areas in which he is lacking, which is all of them due to his severe leg break.

P for Progression

The client must gradually increase the time of each exercise and the difficulty of it. For example, he could change the speed at which the treadmill is moving, the surface on which he is tandem walking, the weight of the object when doing floor to knuckles and knuckle to shoulders, he could close his eyes while trying to hold the stork stance, he could make the agile square jump patterns more difficult and he could substitute side shuffling with Karokes when doing the side shuffle throw.

O for Overload

The number of exercises my client has to work on should push his body after weeks of minimal activity. However, the initial soreness and discomfort should gradually cease the more he works on them.

R for Reversibility

My client should work on these exercises on a daily basis and should continue them even after his training with me stops. Otherwise he may begin to see a decline in the function of his leg.

T for Tedium

My client has a large variety of exercises to choose from and many ways to perform each activity which should help to avoid boredom. If he only had a few activities he may grow bored and lose interest in working out and regaining his leg strength.

F for Frequency

My client is on a set schedule of working out every weekday. This amounts to working out five times a week which is within the safe range of activity.

I for Intensity

As was said in the principal of progression, my client should gradually increase the difficulty of the exercises to continue to work his body harder and push it farther.

T for Type

Each of the four activities (walking upstairs, walking the dogs, practicing soccer with his son, and carrying heavy boxes at work) my client wants to be able to do have fitness related skills associated with them. For each skill I chose specific exercises that will help improve performance in that skill area and help him to improve in the activities he wants to do. By selecting the right exercises, he will be on track to meeting his goals.

T for Time

My client should gradually extend the time each day that he exercises so he increases how far he pushes himself. This should help him to continue to get the maximum benefit out of his exercises.

Photos of Daily Challenges



My Client's Stairs



My Client Playing Soccer with His Son



My Client with Heavy Boxes at Work



My Client Walking His Dogs

Equipment and Clothing Required

My client will need a few things as far as equipment and clothes. As for clothes he will certainly need a pair of well fitting tennis shoes because improper or ill-fitting shoes can lead to injuries. He will also need a pair of sweat pants and a sweatshirt which are good for exercising because they allow for a wide range of motion while being comfortable. He will need a gym membership also that way he can have access to all the equipment there. More specifically he will need access to a treadmill, a stationary bike, and a rebounder (angled trampoline to throw balls at). Plus, hand weights are useful when increasing the difficulty of some exercises such as squats and lunges.