

## GlideCycle Rehabilitation, Strength and Conditioning Applications

### Rehabilitation Applications:

1. Allows safe mode of aerobic conditioning early on after injury or surgical procedures by allowing well leg training, or any degree of favoring/protecting of injured leg. The GlideCycle may be used even before an athlete is able to safely or effectively condition on a stationary bike or in a pool. The key here is earlier gait normalization and earlier running.
2. Rehabilitation applications extend to all sports and especially running athletes.
3. Allows multiple athletes to train at one time and is much less expensive than other rehab equipment such as underwater treadmills and the Alter G.
4. Allows earlier restoration of running form during rehabilitation by minimizing impact to joint and soft tissues and allowing running simulation in an athlete's actual outdoor or indoor running environment against gravity.
5. GlideCycle conditioning simulates more normal running patterns allowing much more functional carry over to actual running and sports activity than conditioning on a stationary bicycle. Stationary cycling works muscle groups very differently than running and thus it is more difficult to simulate sports specific conditioning on a bike.
6. Allows earlier speed and power training with less soreness and stress to injured tissues.
7. More natural transition to full running motion than from pool or stationary bicycle. Movements in a pool against water resistance tend to be slower and training with water buoyancy is quite different than training out of water for the entire body. GlideCycle training does not change the external environment or eliminate forces of gravity; it simply reduces impact to lower extremity and spinal joints.
8. Allows injured athletes to train outdoors with teammates rather than being isolated in a training room on stationary equipment. For example, recovering track athletes may Glide on outside lanes or injured football players may circle the practice field.

### Examples of conditions where GlideCycle training may greatly enhance recovery:

- Anterior knee pain syndromes (Chondromalacia, extensor mechanism dysfunction/patellar tracking problems, various tendinopathies, bursitis)
- Meniscus or joint injuries (including chondral defects)
- Ligament injuries
- Turf Toe, heel spurs, metatarsalgia
- Ankle injuries
- Muscle strains and contusions
- Post-operative rehabilitation
- Various hip or back conditions

## Strengthening and Conditioning for Performance Enhancement:

- Stride lengthening and enhancement
- Power training with brake resistance (explosive starts)
- Speed training
- High knee running
- Reciprocal bounding (as in long jump approach)
- Double leg bounding
- Single leg training
- Recovery workouts that allow aerobic conditioning without the usual soreness, fatigue and eccentric tissue breakdown from standard training
- Conditioning for large athletes, especially linemen. May be great tool for off-season weight loss or management and for building endurance base prior to start of season. More comfortable on joints, promotes enhanced running motion and may prevent injuries or joint breakdown, especially in larger, predisposed athletes.