



## **“BETTER BALANCE FOR SPORTS”**

The SportKAT/Korebalance™ is a perfect device for the testing and training of both static and dynamic (functional) balance. Currently, our products are in use by several professional sports teams (NBA, NFL, MLB, NHL), certain members of the PGA, as well as major universities and sports clubs around the world. Balance training can be a vital component in getting an injured player back on the squad quicker, increasing each player’s ability to balance and maneuver on the court or field, and helping to prevent injuries from occurring.

### **TRAINING**

The Korebalance™ has been proven effective in increasing balance proficiency. In a past study, using subjects with no history of lower extremity injuries, a 40%-60% improvement was shown for all subjects using the SportKAT/Korebalance™ after six weeks; most of the increase occurred after only three weeks. The results of this study demonstrated a positive beneficial effect of SportKAT/Korebalance™ balance training in subjects regardless of their initial balancing abilities.

New information is coming out all the time on the effectiveness of the SportKAT/Korebalance as a preventative maintenance tool. There are already a number of collegiate and professional sports programs that use the SportKAT/Korebalance™ as part of the team’s regular workout program. Trainers for these programs have noticed a decrease in the number of lower extremity joint injuries since implementing the SportKAT/Korebalance™ into the athletes’ routine. In fact, a recent study produced an 87% decrease in ACL injuries for teams using a balance-training program.

### **INJURIES**

The most frequent injuries sustained in sports are injuries to the lower limb, particularly injuries to the knee and ankle. Many of these injuries have been attributed to loss of balance while landing, or changing direction, which has resulted in the player slipping or falling. Although poor balance may be a major risk factor associated with lower limb injuries, many sports programs have been slow to address this problem.

In athletics, it is extremely important to get the injured athlete back on the court, or field, as soon as possible. However, incomplete neuromuscular rehabilitation affects athletic performance and can lead to re-injury. For Example, a knee injury involving a player’s ACL can disturb the joint’s ability to correctly, and quickly, sense it’s position in space; therefore, leading to increased, and incomplete, recovery time and greater chance of re-injury. The SportKAT/Korebalance™ can help you lessen this problem. SportKAT/Korebalance is an excellent tool for vestibular rehab for head trauma.

### **EXERCISE / DRILLS**

Choose from an established list of drills and exercises, or create your own, such as passing, catching, shooting, or swinging drills. These exercises are fun for the athlete as well as functional.



## Recommended Exercises for Sports

The following exercises are recommendations for training in specific sports. We encourage trainers and physical therapists to use these exercises with their athletes or patients, but also encourage the adding or subtracting of exercises based on the individual trainer or therapist's training protocol. When creating new exercise patterns, one may want to look toward using letters of the alphabet, numbers, and shapes. These recommendations are to be used in addition to the protocols offered on the SportKAT/Korebalance.

The duration of the exercises may also vary. For static balance training, it is recommended to start with a 30 second test working up to 5 minutes. (30 seconds – 2 minutes is usually used) For dynamic exercises, start with one minute test and increasing up to five minutes. Squats are usually performed at 10 – 30 repetitions with a 90 degree bend of the knees; single leg squats with non-used foot resting on a chair have also been used.

### **SOCCER**

#### **Both Legs**

- Level Balance
- Squats
- Square
- Side-to-Side
- Square
- Circle
- Infinity (sideways figure 8)
- Opposing Quadrants (feet at the 2 & 7 O'clock or 11 & 5 O'clock positions)

#### **Single Leg**

Level Balance  
Squats  
Front to Back

#### **Additional Exercises:**

Using a partner, the athlete can have a ball tossed at him/her and perform head passes, chest traps, or catches. Throw-ins and tosses may also be done.

### **BASKETBALL**

#### **Both Legs**

- Level Balance
- Squats
- Cross
- Circle
- Square
- Figure 8
- Infinity (Sideways 8)

#### **Single Leg**

Level Balance  
Squats  
Front-to-Back

#### **Additional Exercises:**

Using a partner, perform pass/catch exercises; Practice free-throws by placing the SportKAT/Korebalance™ at the foul line; Practice lay-ups by placing the SportKAT/Korebalance™ on the side of the basket, and balance on the appropriate foot.



## HOCKEY / ICE SKATING/ ROLLERBLADE

### Both Legs

- Level Balance
- Squats
- Side-to-Side
- Square
- Triangle
- Square
- Figure 8
- Infinity (sideways 8)

### Single Leg

- Level Balance
- Squats
- Side-to-Side

### Additional Exercises:

Try balancing in pads or skates (Be careful while in skates); shooting, passing, receiving drills.

## VOLLEYBALL

### Both Legs

- Level Balance
- Squats
- Circles
- Cross
- Square

### Single Leg

- Level Balance
- Squats

### Additional Exercises:

By oneself or with a partner, perform sets, bumps, and serves while maintaining balance.

## SKIING

### Both Legs

- Level Balance
- Squats
- Cross
- Circles
- Box
- Figure 8
- Triangle

### Single Leg

- Level Balance
- Squats
- Cross

### Additional Exercises:

Try to hold level balance while in skiing position; with poles, and while in race position, perform an imaginary course or one on video (Skiing software program may be available in near future).

## **BASEBALL / SOFTBALL / CRICKET**

### **Both Legs**

- Level Balance
- Squats
- Cross
- Infinity (Sideways 8)
- Circle

### **Single Leg**

- Level Balance
- Squats

### **Additional Exercises:**

Using a partner, catching/throwing drills; swinging the bat and bunting drills; Catchers can be in crouching position and receive pitches.

## **FOOTBALL / RUGBY / AUSTRALIAN RULES FOOTBALL**

### **Both legs**

- Level Balance
- Squats
- Circle
- Cross
- Box
- Figure 8
- Infinity (sideways 8)

### **Single Leg**

- Level Balance
- Squats
- Circle
- Cross

### **Additional Exercises:**

With a partner, perform catch/pass drills, ball carriers may hold ball in running position while doing regular exercises; linemen may try to hold platform steady while in set position, kickers may balance on one leg and perform slow kicking drills.

## **GOLF**

### **Both Legs**

- Level Balance
- Squats
- Circle
- Figure 8

### **Single Leg**

- Level Balance
- Squats

### **Additional Exercises:**

Practicing of putting stroke while keeping the platform level; swinging of clubs at a reduced speed.

## MARTIAL ARTS

### Both Legs

- Level Balance
- Squats
- Circle
- Cross
- Square
- Figure 8

### Single Leg

Level Balance

### Additional Exercises:

Try to perform kicks while maintaining single leg balance; practice punches and blocks, practice weapons striking routines.

## ARCHERY / SHOOTING

### Both Legs

- Level Balance
- Squats
- Cross
- Circles
- Figure 8

### Single Leg

Level Balance

### Additional Exercise:

Hold level balance while in shooting stance with equipment. Try shooting off the platform.

**The following is the training protocol as used in a study on the training effects in norms.**

<u>Exercise</u>	<u>Leg</u>	<u>Duration</u>
Level Balance	Both	1 minute
	Right only	1 minute
	Left only	1 minute
Side-to-Side	Both	1 minute
Squats (90 degrees)	Both	10 reps
Front-to-back	Both	1 minute
Squats (90 degrees)	Both	10 reps
Circles	Both – Clockwise	1 minute
	Both – Counterclockwise	1 minute
Figure 8	Both – Clockwise	1 minute
	Both – Counterclockwise	1 minute