Y Balance Test™ Protocol:

Have the individual practice 6 trials on each leg in each of the 3 reach directions prior to formal testing. This is because researchers have found a significant learning effect with the SEBT where the longest reach distances occurred after 6 trials followed by a plateau. Practice can occur off of the device. If you are testing a large group, have everyone practice while waiting to be tested. The test is performed with the shoes off. The person should stand on 1 leg on the center foot plate with the most distal aspect of the toes just behind the red starting line. While maintaining single leg stance, the person reaches with the free limb in the anterior, posteromedial, and posterolateral directions in relation to the stance foot. In order to improve the reproducibility of the test establish a consistent testing protocol. The recommended testing order is 3 trials standing on the right foot reaching in the anterior direction (right anterior reach) followed by 3 trials standing on the left reaching in the anterior direction. This procedure is repeated for the posteromedial and the posterolateral reach directions. The specific testing order is right anterior, left anterior, right posteromedial, left posteromedial, right posterolateral, and left posterolateral.

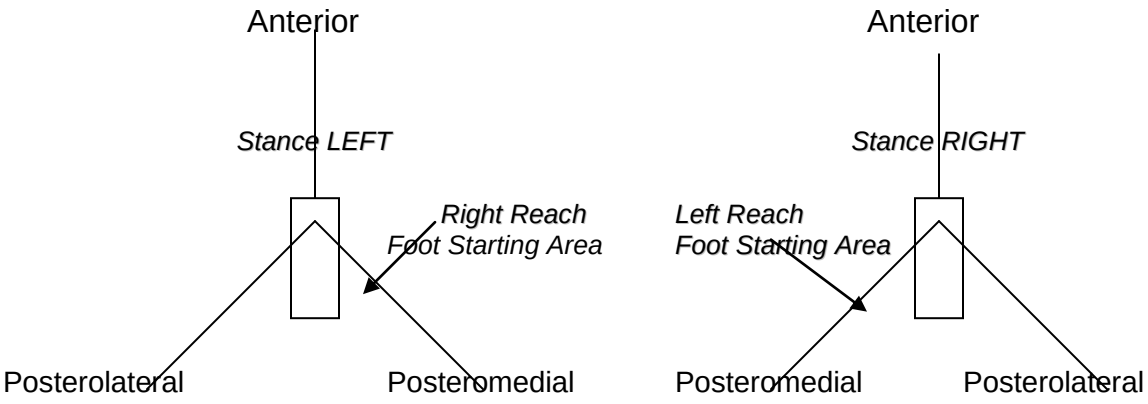
The person stands on the platform with toes behind the line and pushes the reach indicator in the red target area in the direction being tested. The maximal reach distance is measured by reading the tape measure at the edge of the reach indicator, at the point where the most distal part of the foot reached in half centimeters (e.g. 68.5, 69.0, 69.5 cm). The reach is discarded and repeated if the subject: 1) fails to maintain unilateral stance on the platform (e.g. touches down to the floor with the reach foot or falls off the stance platform), 2) fails to maintain reach foot contact with the reach indicator on the target area while in the reach indicator is in motion (e.g. kicks the reach indicator), 3) uses the reach indicator for stance support (e.g. places

foot on top of reach indicator), or 4) fails to return the reach foot to the starting position under control. The starting position for the reach foot is defined by the area immediately between the standing platform and the pipe opposite the stance foot. The greatest successful reach for each direction is used for analysis. The greatest reach distance from each direction is summed to yield a composite reach distance for analysis of overall performance on the test.

Lower Limb Length: After the person lifts the hips off the table, the examiner passively straightens the legs to equalize the pelvis. The person's right limb length is measured in centimeters (to the nearest half centimeter) from the most inferior aspect of the anterior superior iliac spine to the most distal portion of the medial malleolus.

Score Analysis

The difference between the right and left reach distance is calculated for each direction. This difference should not be more than 4cm. The total (composite) reach distance compared to limb length is also calculated by adding the three reach directions together and dividing by 3 times limb length (in cm) then multiplied by 100.



Key Points for the Y Balance Test Procedure

Recommendation	**Rationale**
Shoes off	Individuals attend testing in a variety of footwear so it is difficult to standardize
6 practice trials	Learning effect
Video instruction	Increases efficiency of testing protocol and standardizes instruction.
Standard testing order	Minimize fatigue by alternating stance limbs. Improves consistency in administration of test.
Stance foot aligned at most distal aspect of toes	Keeps starting point in a uniform and reproducible position to which the reach foot can be referenced
Stance foot movement is allowed	Difficult to reliably determine if heel/forefoot is lifted from the surface
Body movement allowed under control	Difficult to standardize amount of movement allowed.
Normalized to limb length	Normalization standardizes measurement to each individual
Standard reach height	Allows reach height to be uniform