



FITNESS ASSESSMENT INFORMATION SHEET



Test	What It Measures	Why It's Important	How Speed Training is Unique
Standing Height / Sitting Height Ratio	<i>Percentage of Peak Height Velocity</i>	<ul style="list-style-type: none"> • “Peak Height Velocity” or PHV, is the measure of the maximum rate of growth in stature during a growth spurt • As athletes, it may be more useful and accurate to make comparisons between athletes based on their % of PHV, as opposed to their chronological age 	<ul style="list-style-type: none"> • Speed Training is presently the only sport performance training company in Canada that measures athletes’ percentage of Peak Height Velocity • Our extensive research has allowed us to accumulate a huge database of standards and norms for % of PHV
Counter Movement Jump	<i>Leg Muscle Elasticity</i>	<ul style="list-style-type: none"> • “Elasticity” is the ability to quickly stretch, then contract, muscles quickly • This action happens frequently in any athletic movement 	<ul style="list-style-type: none"> • Speed Training is presently the only sport performance training company in Canada to utilize the Optojump Next electronic timing system, which is the most accurate measuring tool for Leg Muscle Elasticity, Power, and Reactive Strength, in the world.
Squat Jump	<i>Leg Muscle Power</i>	<ul style="list-style-type: none"> • “Power” is the ability to produce a large amount of force in a short amount of time, which is critical in the execution of jumping and sprinting movements in all sports 	<ul style="list-style-type: none"> • Optojump testing is more accurate than other jump assessments because it uses an electronic timing system, maximizing reliability and eliminating human error in the different assessments
Drop Jump	<i>Leg Muscle Reactive Strength</i>	<ul style="list-style-type: none"> • “Reactive Strength” is a measure of agility, which is the ability to contract the leg muscles eccentrically (while lengthening) to slow the body down as quickly as possible – a very frequent occurrence in sports where deceleration 	<ul style="list-style-type: none"> • We separate each of the three most important jump characteristics and assess each one individually. In this way, we can ensure that we are identifying the specific areas of jumping ability, leg power, and agility, that each athlete needs to work on, and customize their training programs accordingly
Max Treadmill Speed Test	<i>Maximal Running Speed</i>	<ul style="list-style-type: none"> • “Speed Test” measures how fast an athlete can move the treadmill in a “self-propelled” mode – when the motor is shot off • Running speed is the physical ability we spend more time on than any other at Speed Training, because it is the one physical ability that differentiates elite from sub-elite athletes in all competitive sports • As running speed, strength, and technique improves from training, the maximal treadmill speed will improve. 	<ul style="list-style-type: none"> • Speed Training offers the Max Treadmill Speed Test to determine how fast an athlete can run. Speeds reached on the treadmill are strongly correlated with speeds reached on the ground • Once an athlete’s maximal treadmill speed has been determined, we customize the speeds they will run in training (on our motorized and nonmotorized treadmills) as a percentage of their maximal running speed. This allows for each athlete to get a customized, individualized training program
Speed Decrement	<i>Repeated Sprint Ability/ Endurance</i>	<ul style="list-style-type: none"> • Alongside the Max Treadmill Speed test, athletes will do a total of 6 runs (with the highest speed attained used as the Max Treadmill Speed test result. • The goal of the other runs is to determine the size of the “Decrement”, or decrease, in running speeds of subsequent runs The smaller the decrement, the better the repeated sprint ability and endurance. 	<ul style="list-style-type: none"> • Offering the Speed Decrement test as an indicator for athletes’ endurance allows us to determine how efficient an athlete is at recovering after providing a max effort sprint. • We are able to quantify an athlete’s ability to recover between these sprints, and can then assess the effectiveness of the training based on the amount of improvement – or decrease – in each athletes’ speed decrement.
Functional Movement Screen	<i>Movement Efficiency</i>	<ul style="list-style-type: none"> • “Movement Efficiency” is the ability to perform athletic movements in a way that maximizes efficiency while minimizing the risk of injury • Athletes who move more efficiently will perform better 	<ul style="list-style-type: none"> • SpeedTraining utilizes the renowned Functional Movement Screen to assess movement efficiency • This system was developed by some of the best sport performance coaches in the world, and provides a standardized, objective measure of several key components of athletic performance