

# GAIT & BALANCE REPORT

Difficulties with gait and balance are among the most common causes of falls and negatively influence quality of life. Given that falls are a major public health problem we strive to make everyone fully aware of different assessments, tools, and resources available for gait/balance interventions.

Step Length - distance between the point of initial contact of one foot and the point of initial contact of the opposite foot.

Velocity (cm./sec.) - individual's comfortable walking speed.

Stride Length (cm.) - distance between successive points of initial contact of the same foot.

Stride Width (cm.) - distance between the center lines of the two feet, perpendicular to the direction of walking.

Step Time (sec.) - time between two consecutive heel strikes.

Stride Time (sec.) - the time between two consecutive heel strikes by the same leg, one complete gait cycle.

Stride Velocity (cm./sec.) – velocity of the leg during a single stride.

Stance % - begins when the foot first touches the ground and ends when the same foot leaves the ground.

Swing % - the percentage of the gait cycle which the body is supported by one leg

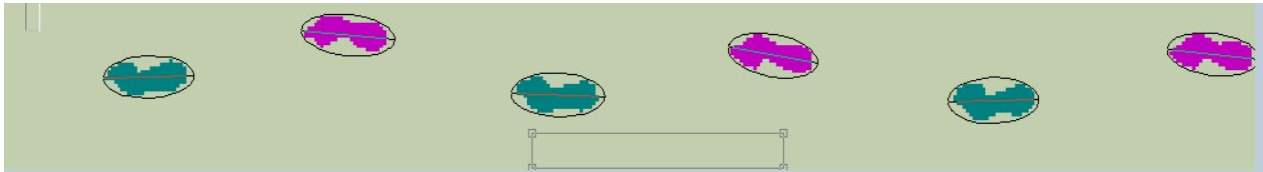
Cadence - steps per minute.

Gait Variability - If a number is lower than 100 it means the subject has less variability than the average norm and a number higher than 100 means the subject has more variability than the average norm.

Stance COP Distance - distance between first and last contact of the COP

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Stance COP Distance % - represents the COP start to end distance as a percent of the maximum foot length.



Example: Gait data

Measure	Your Value	Normative Values*
Step Length (cm.)	82.59	71-46
Velocity (cm./sec.)	155.47	131-77
Stride Length (cm.)	167.04	142-93
Stride Width (cm.)	16.12	22-11
Step Time (sec.)	0.53	.66-.49
Stride Time (sec.)	1.07	1.31-.99
Stride Velocity (cm./sec.)	155.47	132-78
Stance %	63.72	68-62
Swing %	36.29	37-31
Cadence (steps/min.)	111.72	117-92
Gait Variability	96.54	100
Stance COP Dist. (cm.)	1.66	2.2-.13
Stance COP Dist. %	7.84	9.2-.75

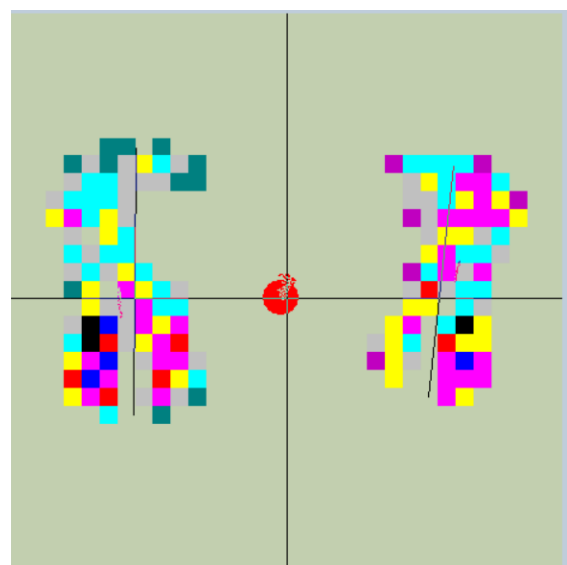
**Highlighted Green Items:** Greater than normative data

**Highlighted Yellow Items:** Lower than normative data

\*Normative values are based on the test results from our local community

Results are only meant to inform and not to diagnose conditions or order treatment

For more Information about your results, please contact, **Dr. Jared Skinner** ([skinnerjw@appstate.edu](mailto:skinnerjw@appstate.edu))



Example Balance Data