SPARTASCIENCE

INSTRUCTIONAL

Scan Guide

How to interpret and relay Sparta Scan results to patients in the clinic.

Key Terms

Sparta Score

72 +2

78th Percentile for women born 1994
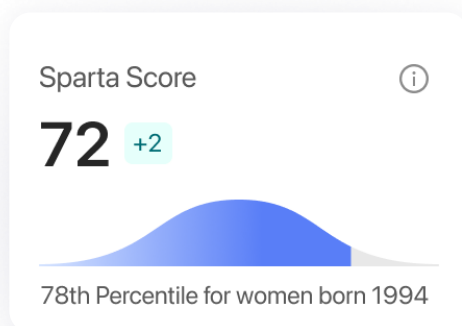
Sparta Score represents your Dynamic Movement Efficiency

Sparta Score represents an individual's dynamic movement efficiency. Higher scores indicate better efficiency, with typical values ranging between 75-85.

Balance

57 +2

58th Percentile for women born 1994
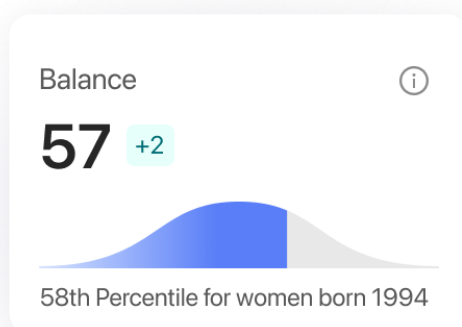
Balance represents your Balance Capability

Balance represents an individual's overall balance capability. Higher scores indicate better balance capabilities, with typical values ranging between 40-60.

Risk

Below Avg -
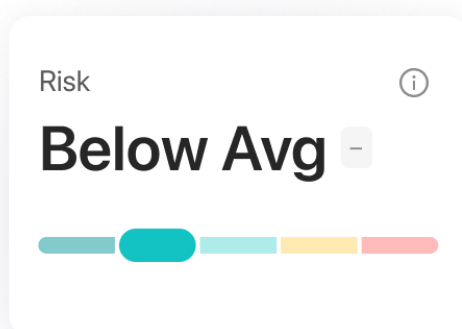
Risk is a Relative Risk Classification

Derived from the most recent Jump Scan, Risk stratifies relative musculoskeletal injury risk utilizing our base athletic population model.

Jump Scan Results

Collectively, Load, Explode, and Drive represent an individual's ability to create, transfer, and apply force in dynamic movement, and are utilized to classify movement strategies.

Jump Signature ⓘ

Load: 45
Explode: 78
Drive: 62
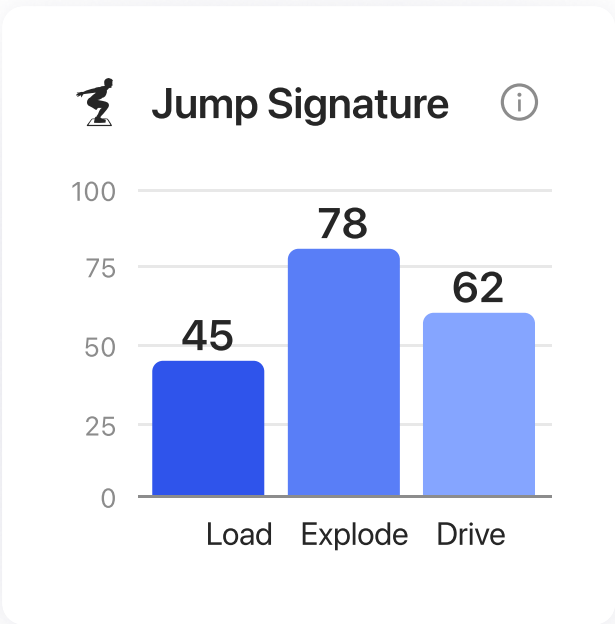
	LOAD	EXPLODE	DRIVE
MOVEMENT QUALITY	Ability to CREATE force (eccentric)	Ability to TRANSFER force	Ability to APPLY force (concentric)
GLOBAL	"Strength"	"Power"	"Mobility"
LOCAL	Anterior (Front)	Torso (Core)	Posterior (Back)
MEASUREMENT	Rate of force created (N/s)	Magnitude of force transferred (N/kg)	Impulse or Sum of force applied (Ns/kg)

Jump Shift ⟩ ⓘ

8 Right

→ 2

50 L   25 L   0   25 R   50 R
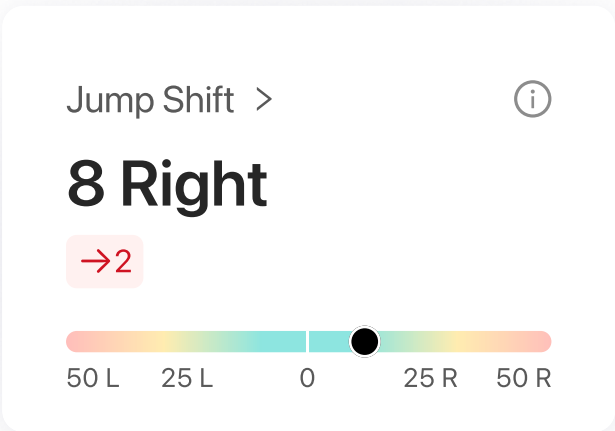
Jump Shift

Jump Shift represents the lateral shift of movement during loading (eccentrically)
- Higher values indicate a larger lateral shift
- Typical values range between 0-10

Jump Scan Concepts

MOVEMENT CONCEPTS

KEY CONCEPTS

LOAD

- Knee-Dominant
- Squat Patterns
- Anterior Chain
- Upright Torso
- Eccentric Strength

EXPLODE

- Core Stability/Bracing
- Anti-Rotation/Lateral Flexion
- Reactive/Plyometrics
- Relative Strength

DRIVE

- Larger ROM/Longer TUT
- Soft Tissue Manipulation
- Posterior Chain/Triple Extension
- Global Mobility

LOAD & EXPLODE

- Overall Strength/Stability
- Bilateral Emphasis
- Strength in Limited ROM
- Reactive/Explosive Strength

LOAD & DRIVE

- Strength in Full ROM
- Larger ROM/Longer TUT
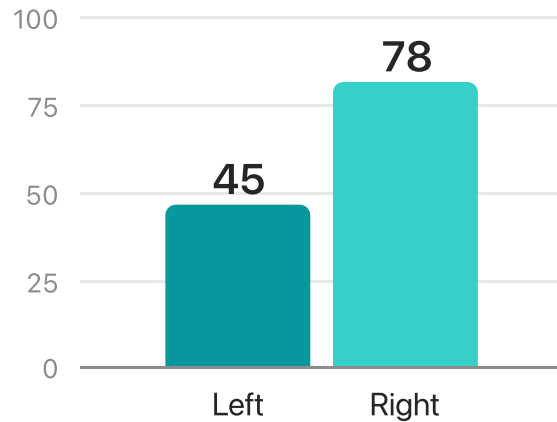- Triple Flexion & Extension
- Global Mobility

JUMP SHIFT

- Prioritize single-leg exercises (see Movement Concepts)
- Assess frequently to monitor asymmetry

Balance Scan Results

Balance Signature

100
75
50
25
0

45 — Left
78 — Right
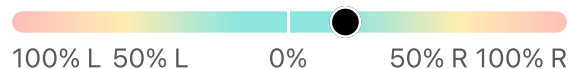
Balance (Right and Left limb values)

- Balance represents an individual's overall balance capability on each limb
- Higher scores indicate better balance capabilities
- Typical values range between 40-60

Balance Asymmetry >

8% Right

→2

100% L   50% L   0%   50% R   100% R

Balance Asymmetry

- Balance Asymmetry represents differences in balance capabilities from side to side
- Higher values indicate greater asymmetry
- Typical values range between 0-20%

SPARTASCIENCE

Balance Scan Concepts

IMPROVING BALANCE

IMPROVING BALANCE

- Balance practice
- Perform distracting tasks while balancing
- Unexpected perturbations while balancing
- Improve relative strength
- Improve flexibility

KEY CONCEPTS

ADDRESSING BALANCE ASYMMETRY

- Prioritize single-leg exercises (see Improving Balance)
- Assess frequently to monitor asymmetry