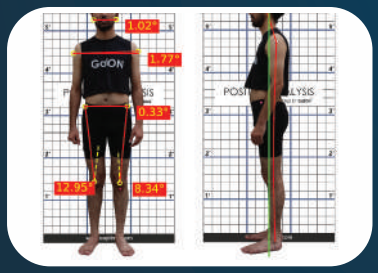
GaitON®

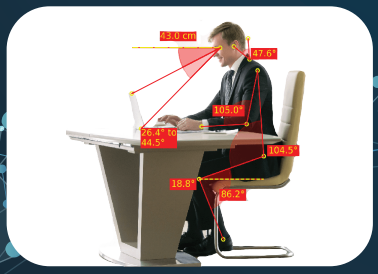
by auptimo



Posture Analysis

Walking Gait analysis

Running Gait Analysis



Sitting Posture Analysis

Bike Fitting Analysis

Golf Swing Analysis

GaitON® is trusted by **500+ clinicians**
globally for gait & posture analysis

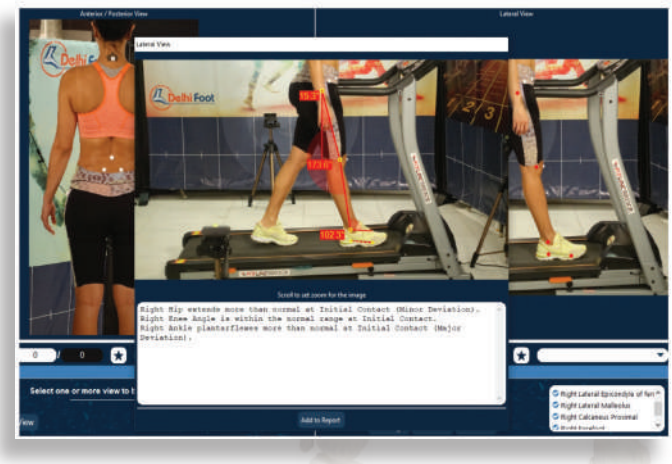
Is your center GaitON ready?

WORKFLOW

A 3 step process to complete a biomechanical assessment

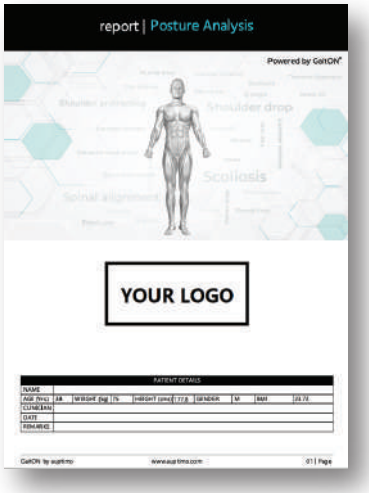
1. CAPTURE

Capture the patient's motion from multiple views using cameras.



2. ANALYZE

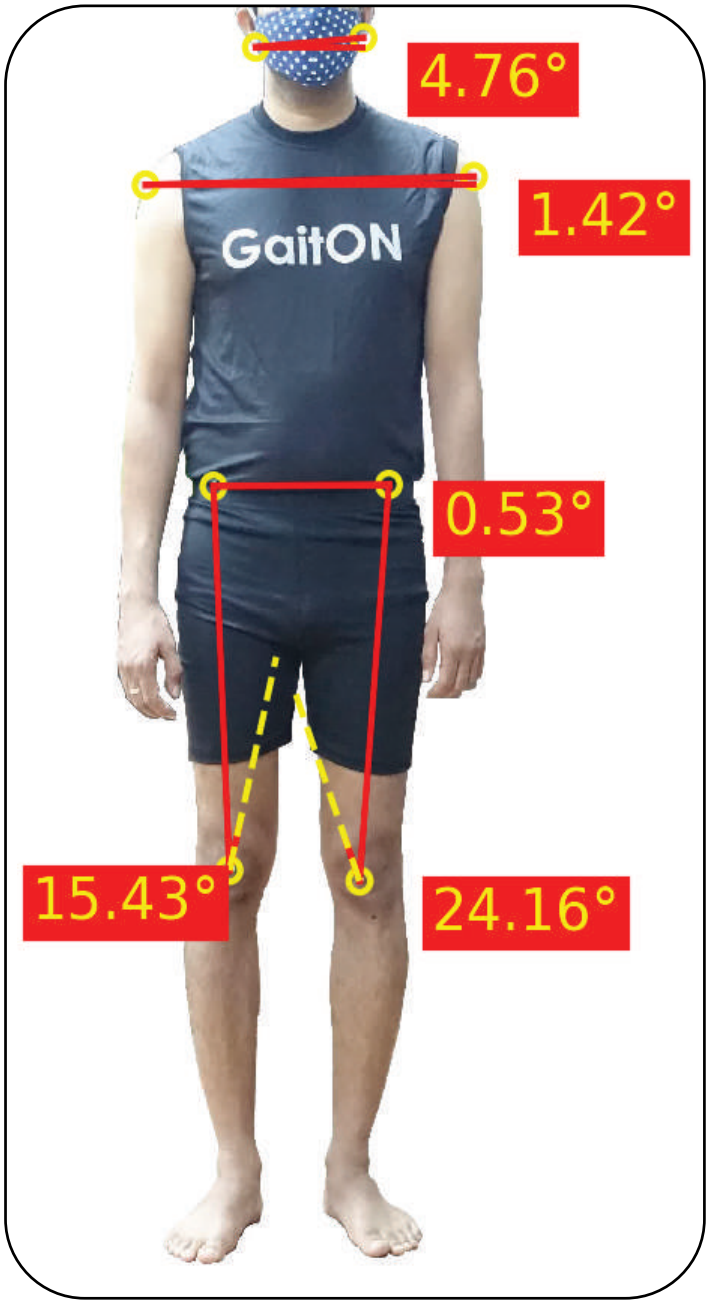
Analyse the motion using GaitON's inbuilt protocols.



3. REPORT

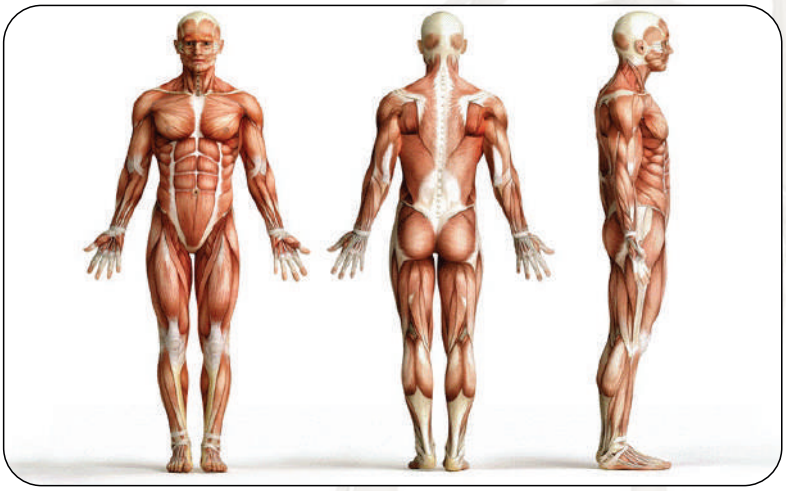
Export the analysis results to well organised and print ready reports.

POSTURE ANALYSIS



GaitON's posture analysis protocol identifies key postural deviations from multiple views & exports all data to a report.

VIEWS ANALYZED



ANTERIOR . POSTERIOR . LATERAL

TIME PER ANALYSIS

5 MINUTES

KEY DATA MEASURED

GaitON's posture analysis protocol analyses the upper & lower body posture of the patient from anterior, posterior & lateral views.

Forward head angle
Head tilt

Shoulder level
Shoulder protaction

Lateral trunk sway/
spinal alignment

Pelvic drop

Genu Recurvatum
Q angle

Foot eversion/inversion

POSTURE REPORTS : KEY FEATURES

Inbuilt reference values for an **accurate diagnosis.**

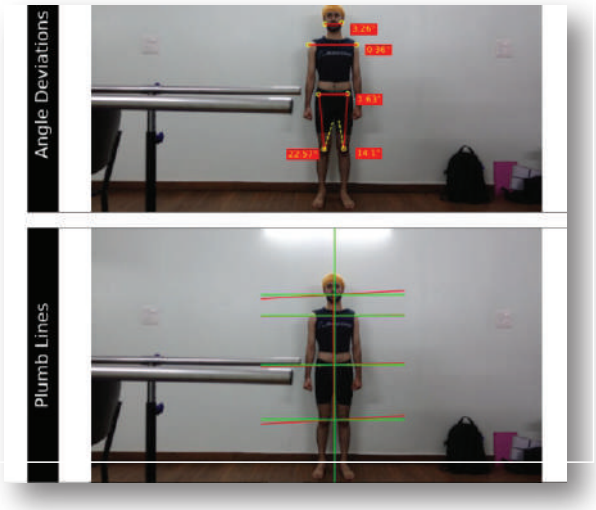
Comparison of left & right extremity posture.

KINEMATIC DATA

Anterior View				
Parameter	Assessment Value	Reference Value		
Horizontal alignment of the Head[a]	(+) 0.9°	0°		
Horizontal alignment of the Acromions[a]	(+) 0.0°	0°		
Horizontal alignment of the ASIS's[a]	(+) 2.3°	0°		
Lateral Trunk Alignment[b]	(-) 2.3°	0°		

Anterior View				
Parameter	Left	Reference Value	Right	Reference Value
Q Angle[c]	(+) 13.5°	< (+) 15° for Men < (+) 20° for Women	(+) 22.0°	< (+) 15° for Men < (+) 20° for Women
Posterior View				
Rear Foot Angle[d]	(+) 1.0°	(-) 5° to (+) 5°	(-) 0.5°	(-) 5° to (+) 5°

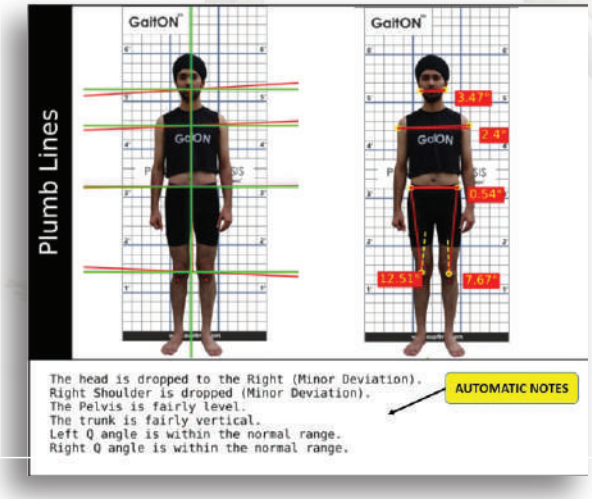
Lateral View				
Parameter	Left	Reference Value	Right	Reference Value
Forward Head Angle	58.9°	> 50°	60.9°	> 50°
Shoulder Angle	87.2°	> 52°	63.1°	> 52°



Representation of **postural deviations** through angles & plumb lines.

Automatic **documentation** of all postural deviations.

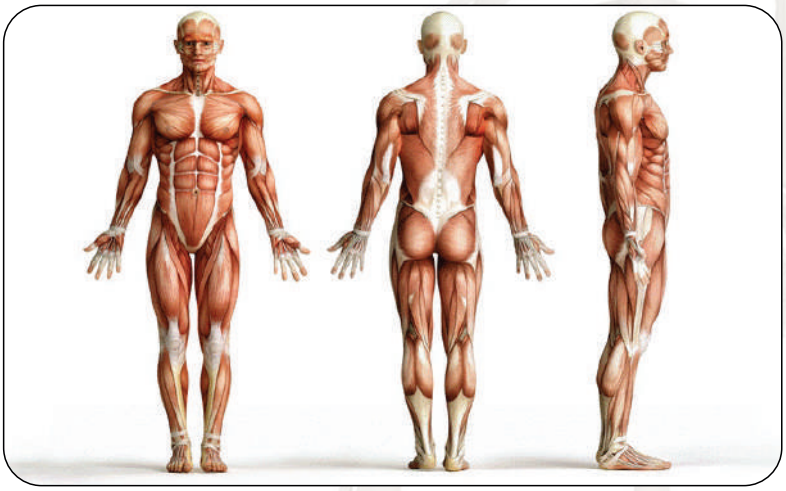
Pre & Post Assessment of posture after any surgical/ rehab intervention.



GAIT ANALYSIS

GaitON's gait analysis protocol identifies key walking deviations from multiple views & exports all data to a report.

VIEWS ANALYZED



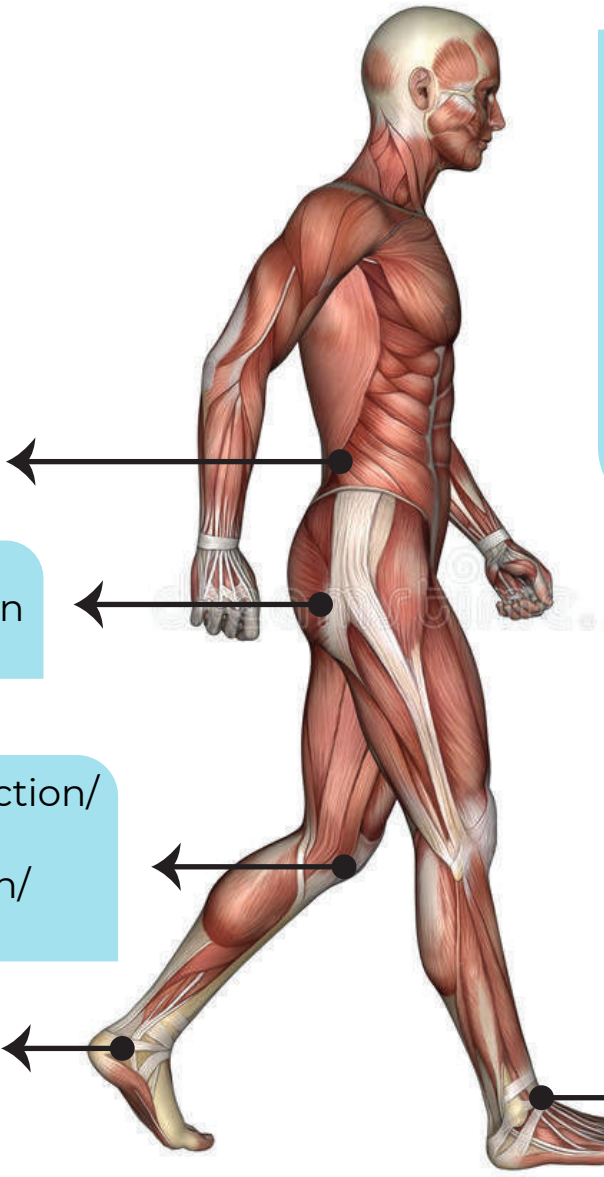
ANTERIOR . POSTERIOR . LATERAL

SURFACE

TREADMILL I WALKWAY

KEY DATA MEASURED

GaitON's gait analysis protocol analyses the pelvis, hip, knee, foot & ankle motion during the entire gait cycle



Pelvic drop

Hip flexion/extension

Knee abduction/ adduction

Knee flexion/ extension

Foot eversion/ inversion

Ankle plantar/ dorsi flexion

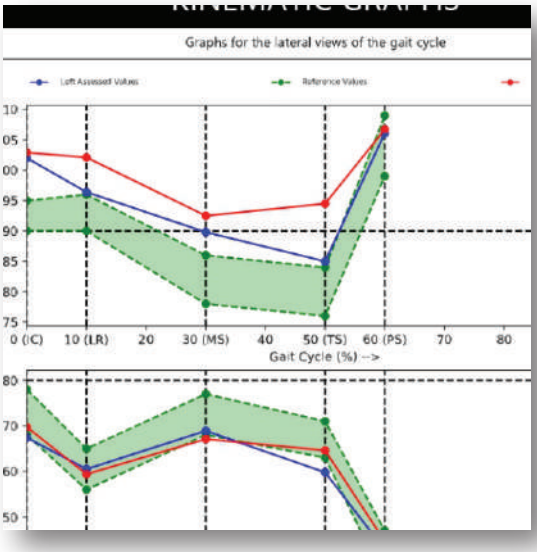
Stance - Swing phase %
Gait cycle variability
Stance - Swing time

Cadence
Single support - double support time
Stride time - Step time

GAIT REPORTS : KEY FEATURES

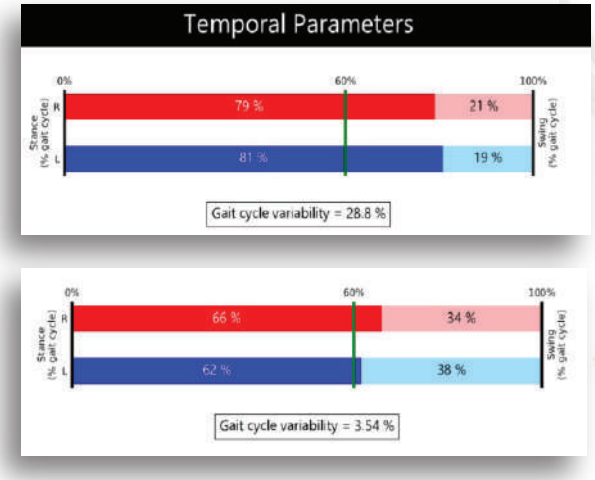
A detailed report with reference values, highlighting all **abnormal gait patterns.**

Comparison between **left & right** extremity gait.

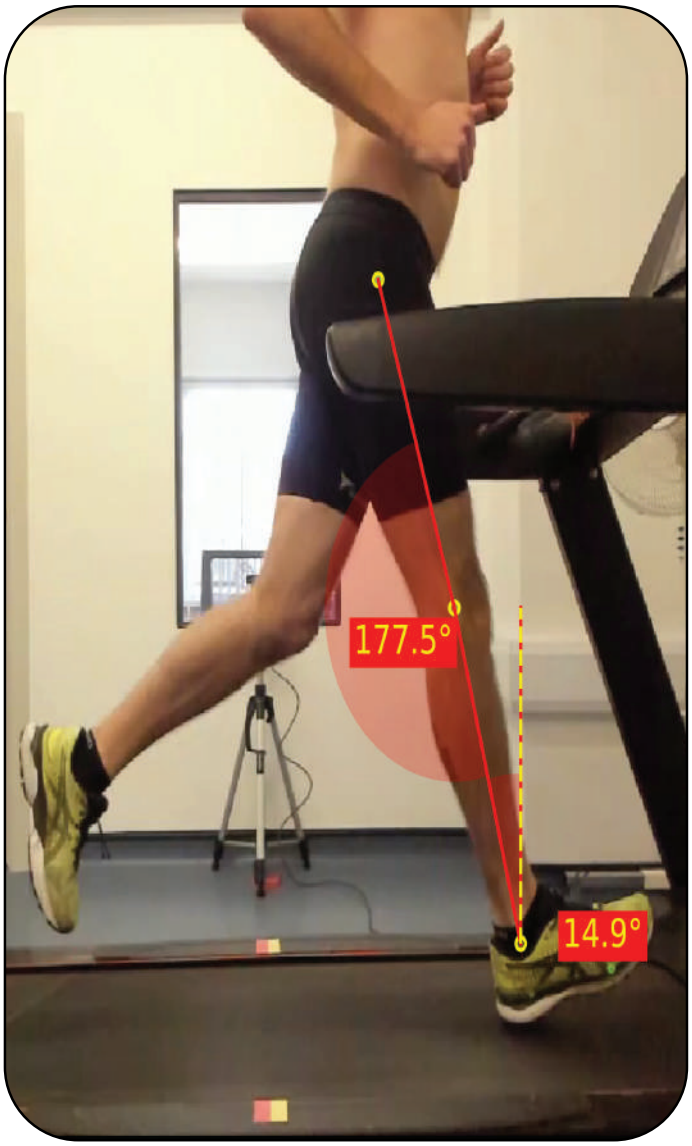


Accurate identification of **muscle imbalances** using kinematic graphs.

Monitor gait changes through **pre-post comparisons.**

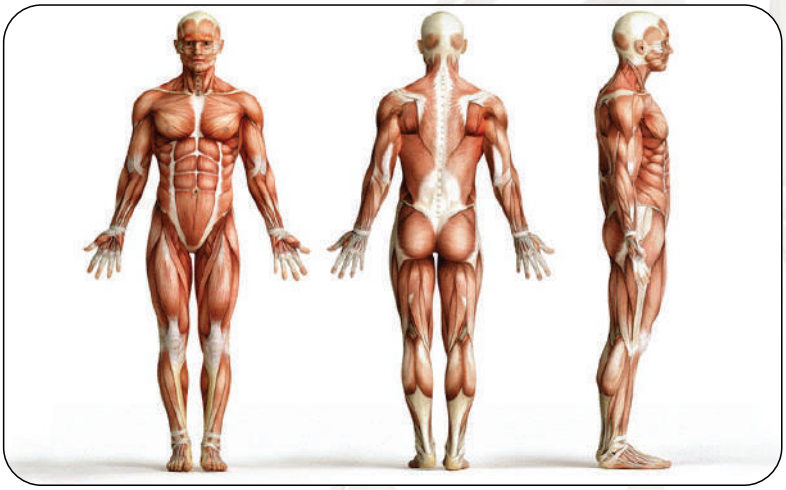


RUNNING ANALYSIS



GaitON's running analysis protocol is based on the directives of UW Health Sports Medicine Clinic, USA & detects any abnormal running gait patterns.

VIEWS ANALYZED



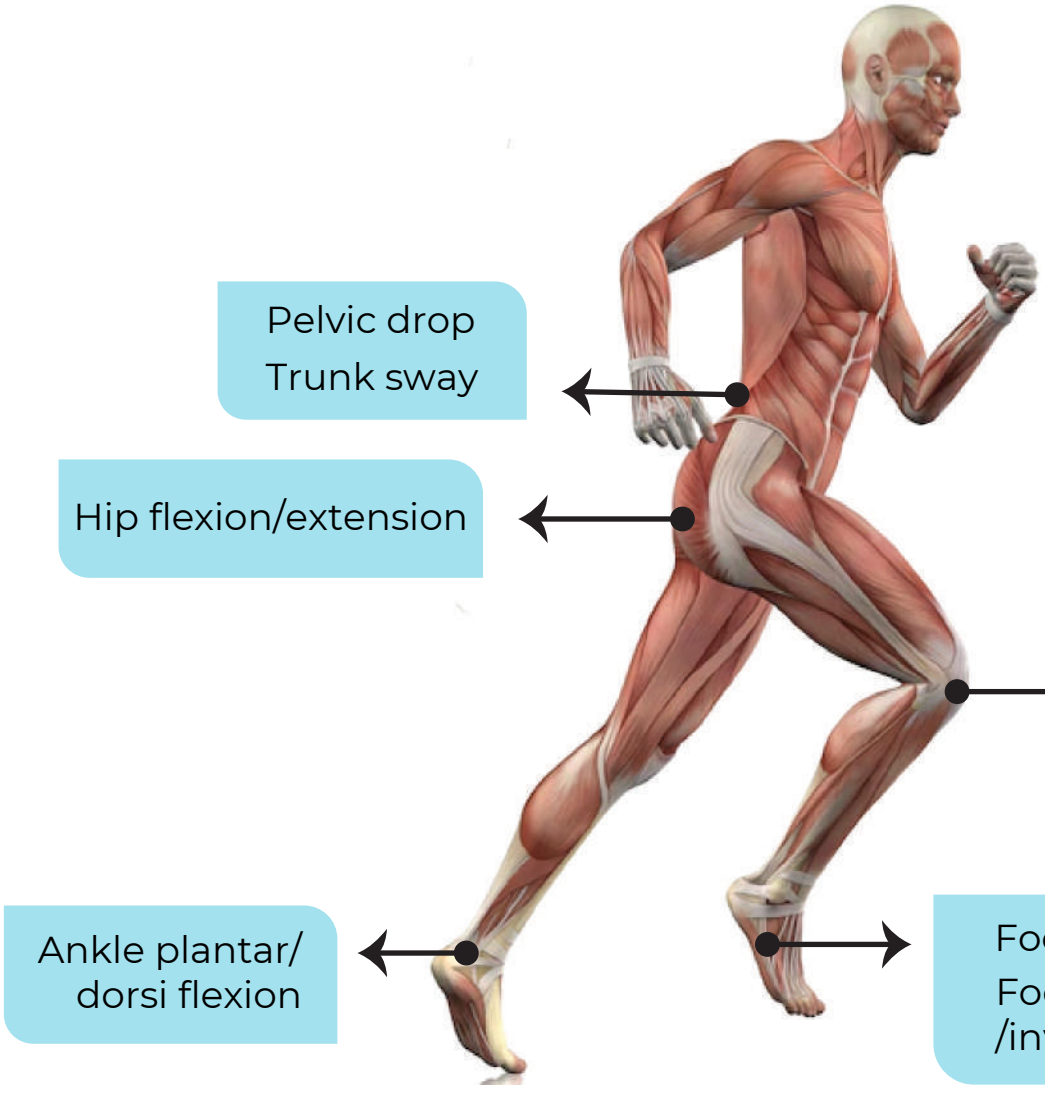
ANTERIOR . POSTERIOR . LATERAL

SURFACE

TREADMILL I RUNNING TRACK

KEY DATA MEASURED

GaitON's running analysis protocol analyses the pelvis, hip, knee, foot & ankle motion during the entire gait cycle



Crossover Gait
Vertical oscillation of COM
Ground contact time
Overstriding

Pelvic drop
Trunk sway

Hip flexion/extension

Knee abduction/ adduction
Knee flexion/ extension

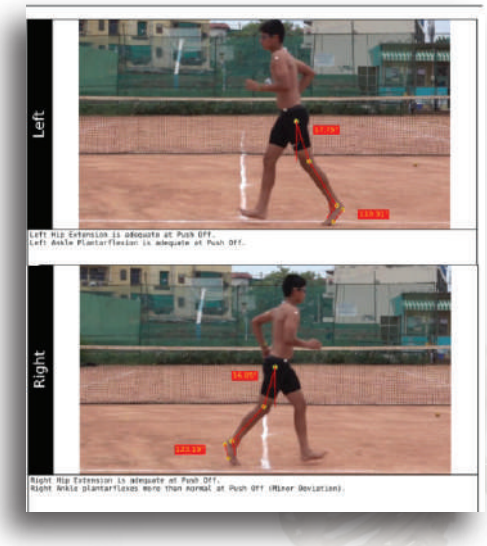
Ankle plantar/ dorsi flexion

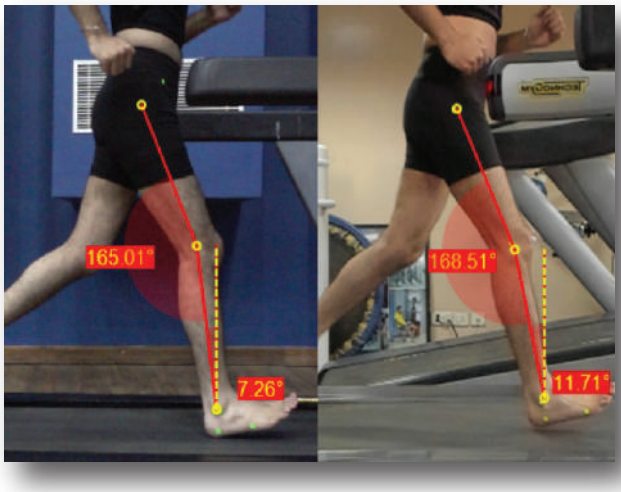
Foot strike pattern
Foot eversion /inversion

RUNNING REPORTS : KEY FEATURES

A detailed report with reference values, highlighting all **abnormal gait patterns**.

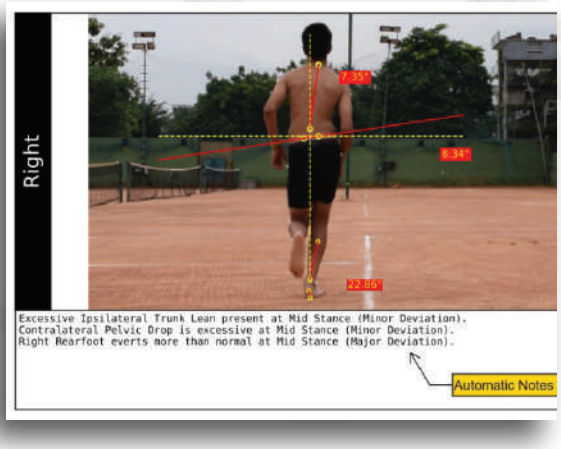
Comparison between **left & right** extremity gait.



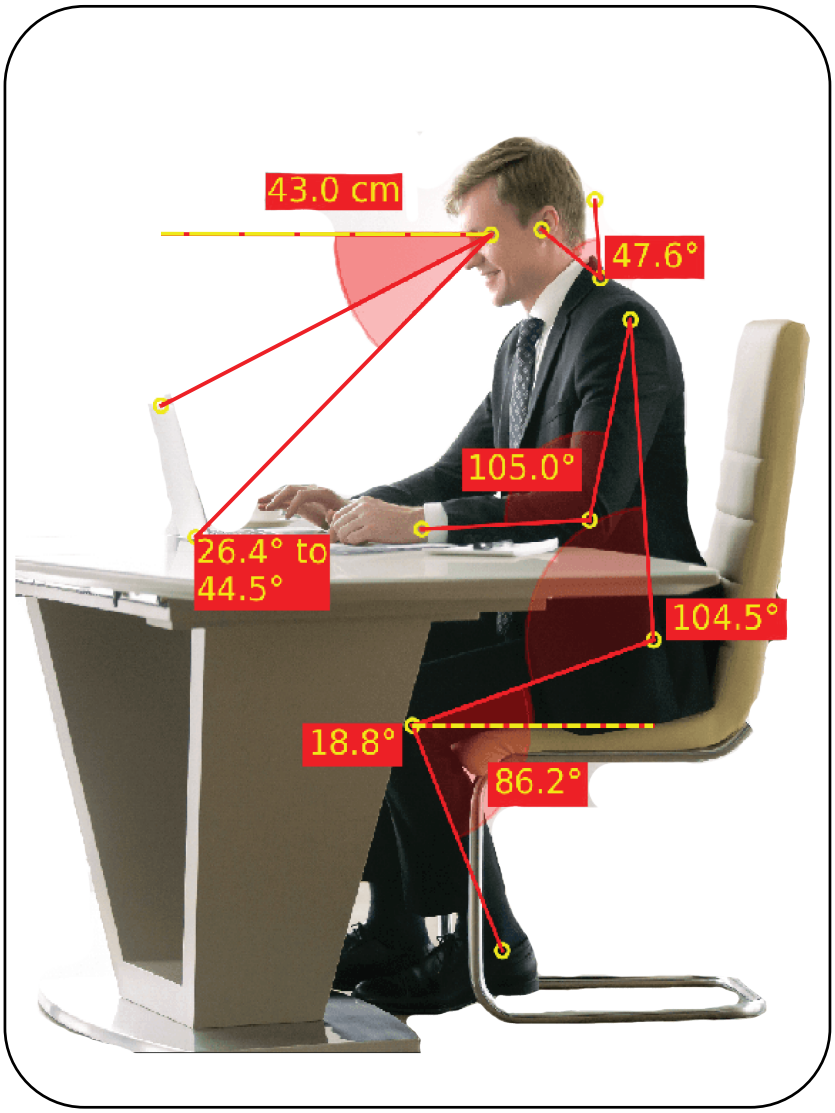


Monitor gait changes through **pre-post comparisons.**

Automatic documentation of all observations.

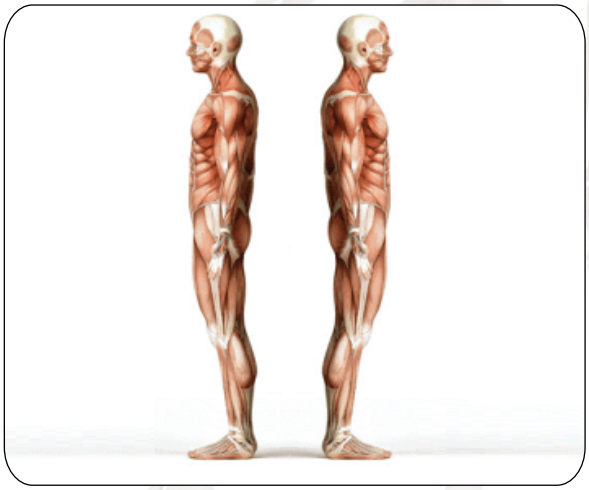


SITTING POSTURE ANALYSIS



GaitON's sitting posture analysis markerless protocol identifies key postural deviations in a few clicks & exports all data to a report.

VIEWS ANALYZED



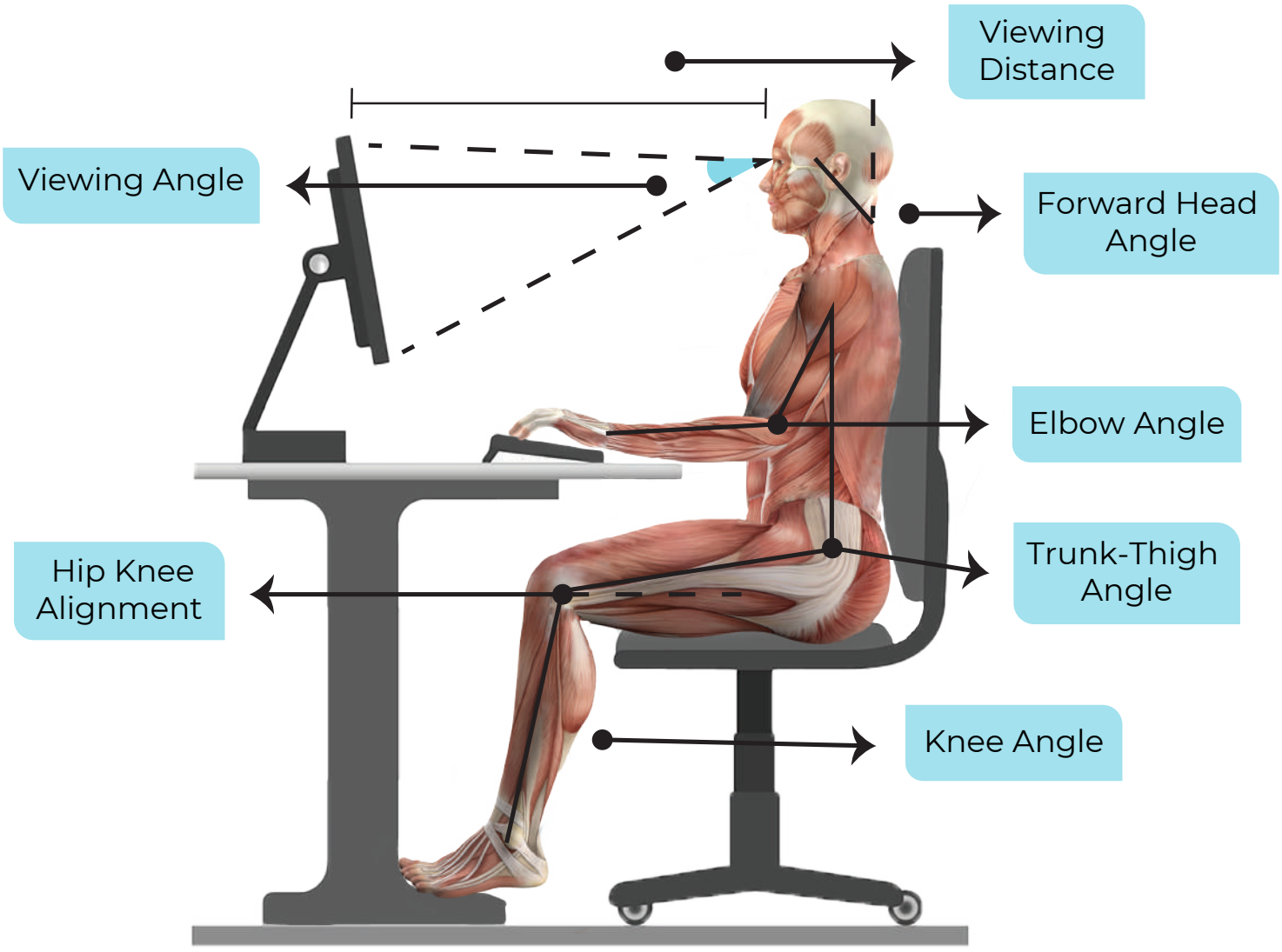
ANTERIOR . POSTERIOR . LATERAL

TIME PER ANALYSIS

5 MINUTES

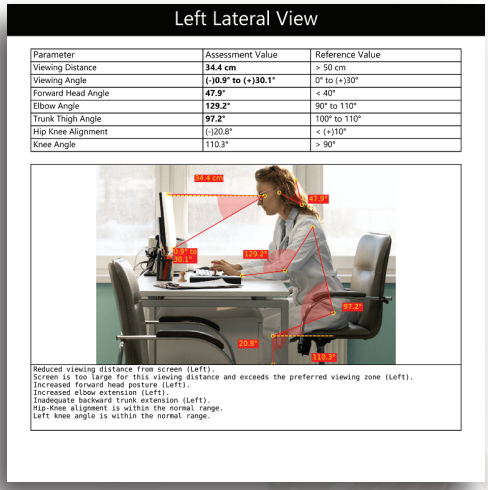
KEY DATA MEASURED

GaitON's sitting module analyses the complete sitting posture from left and right lateral views.



SITTING POSTURE REPORTS : KEY FEATURES

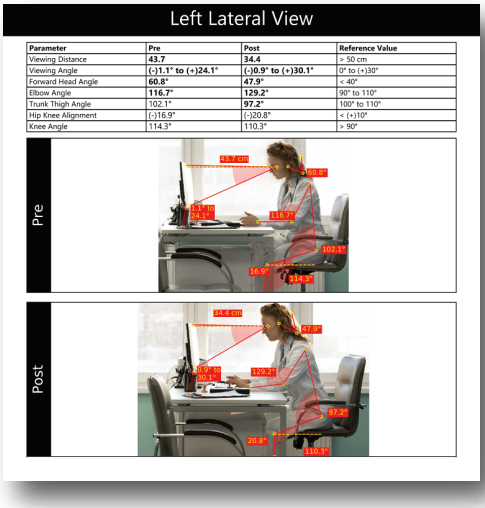
A detailed report highlighting **abnormal postural deviation** in table and angular form.



Left Lateral View

Parameter	Assessment Value	Reference Value
Viewing Distance	**34.4 cm**	> 50 cm
Viewing Angle	**(-)0.9° to (+)30.1°**	0° to (+)30°
Forward Head Angle	**47.9°**	< 40°
Elbow Angle	**129.2°**	90° to 110°
Trunk Thigh Angle	**97.2°**	100° to 110°
Hip Knee Alignment	(-)20.8°	< (+)10°
Knee Angle	110.3°	> 90°

Reduced viewing distance from screen (Left).
Screen is too large for this viewing distance and exceeds the preferred viewing zone (Left).
Increased forward head posture (Left).
Increased elbow extension (Left).
Inadequate backward trunk extension (Left).
Hip-Knee alignment is within the normal range.
Left knee angle is within the normal range.



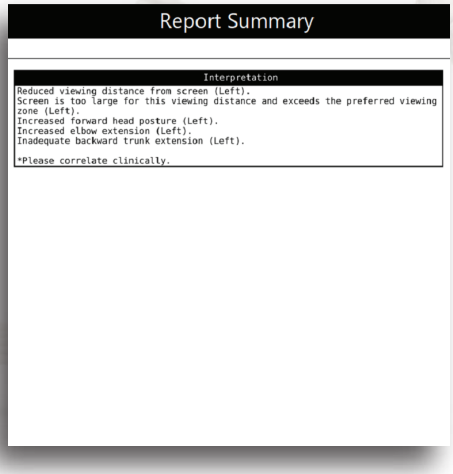
Left Lateral View

Parameter	Pre	Post	Reference Value
Viewing Distance	**43.7**	**34.4**	> 50 cm
Viewing Angle	**(-)1.1° to (+)24.1°**	**(-)0.9° to (+)30.1°**	0° to (+)30°
Forward Head Angle	**60.8°**	**47.9°**	< 40°
Elbow Angle	**116.7°**	**129.2°**	90° to 110°
Trunk Thigh Angle	102.1°	**97.2°**	100° to 110°
Hip Knee Alignment	(-)16.9°	(-)20.8°	< (+)10°
Knee Angle	114.3°	110.3°	> 90°

Pre

Post

Pre-Post comparison of posture.



Report Summary

Interpretation

Reduced viewing distance from screen (Left).
Screen is too large for this viewing distance and exceeds the preferred viewing zone (Left).
Increased forward head posture (Left).
Increased elbow extension (Left).
Inadequate backward trunk extension (Left).

*Please correlate clinically.

Automatic documentation of all observations in the report.

BIKE FITTING ANALYSIS

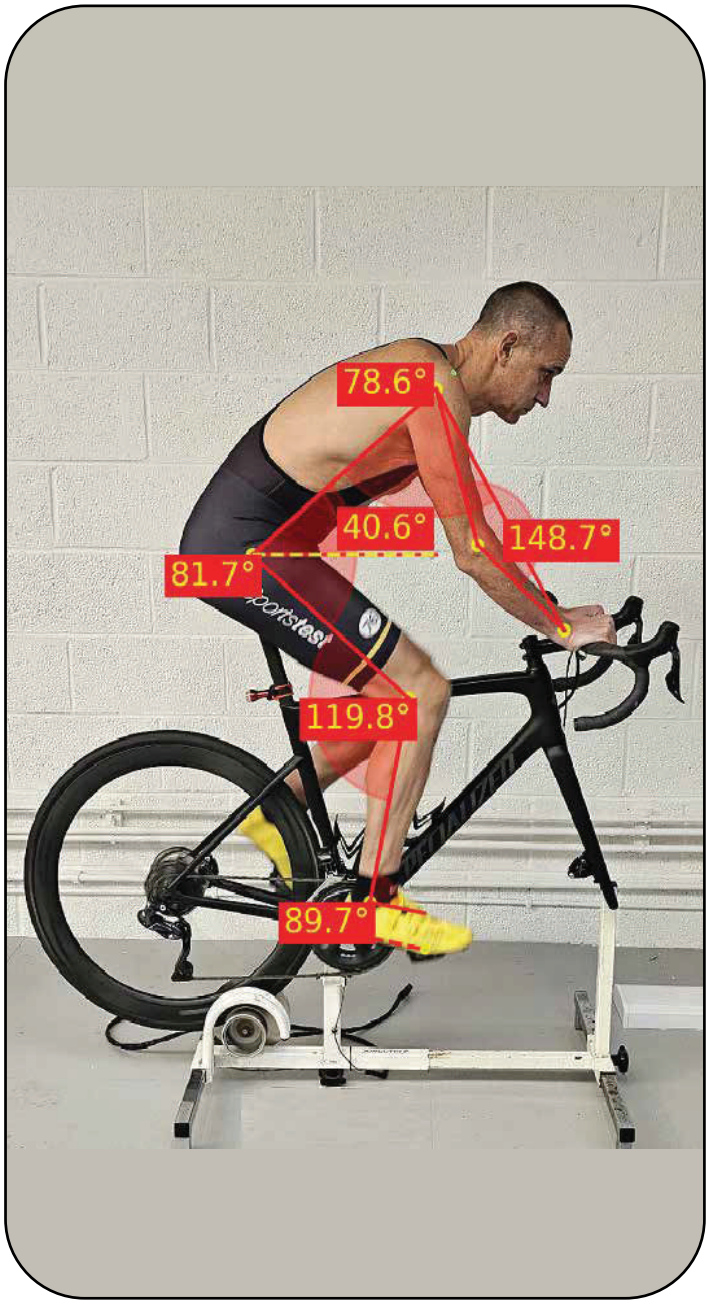


Image Credits: Stanley Sports Ltd.

GaitON® bike fitting software is used by 500+ clinicians globally for a detailed bike fit assessment. It helps in adjusting the bike as per the rider's body measurements, flexibility, riding goals, and any existing injuries.

VIEWS ANALYZED

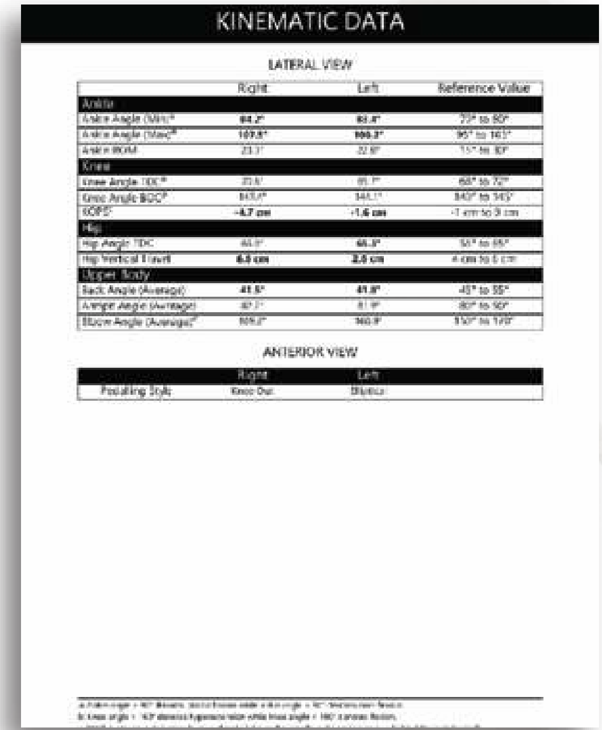
LATERAL AND ANTERIOR VIEW

POSITIONS

ROAD, MTB, TT, TRIATHLETE

BIKE FITTING REPORTS : KEY FEATURES

A detailed report with **reference values and with different fit positions** (Road, MTB, TT, Triathlete).



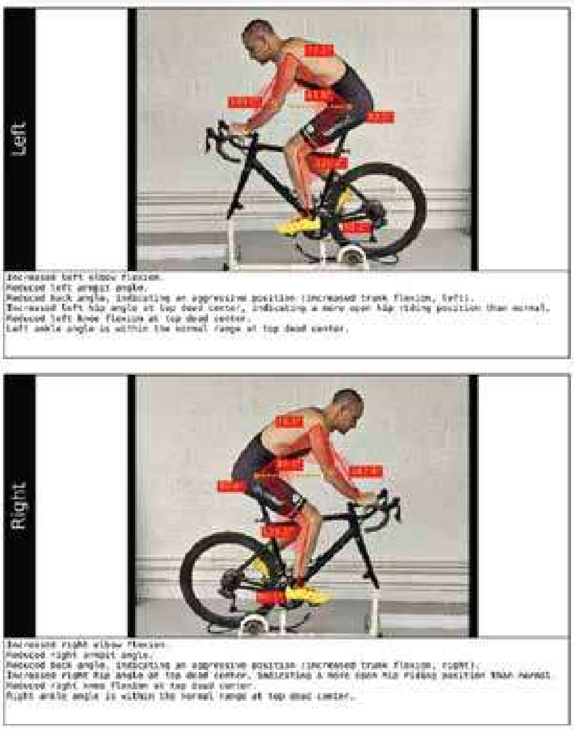
KINEMATIC DATA

LATERAL VIEW

	Right	Left	Reference Value
Ankle			
Ankle Angle (Min)	**84.2°**	**83.8°**	75° to 80°
Ankle Angle (Max)	**107.8°**	**100.3°**	95° to 105°
Ankle ROM	23.7°	22.8°	15° to 30°
Knee			
Knee Angle TDC	73.6°	65.7°	68° to 72°
Knee Angle BDC	143.4°	141.1°	140° to 145°
KOPS	**-4.7 cm**	**-1.6 cm**	-1 cm to 3 cm
Hip			
Hip Angle TDC	46.9°	**46.3°**	50° to 55°
Hip Vertical Travel	**6.5 cm**	**2.5 cm**	4 cm to 6 cm
Upper Body			
Back Angle (Average)	**41.5°**	**41.8°**	45° to 55°
Armpit Angle (Average)	87.7°	81.9°	80° to 90°
Elbow Angle (Average)	109.2°	160.9°	150° to 170°

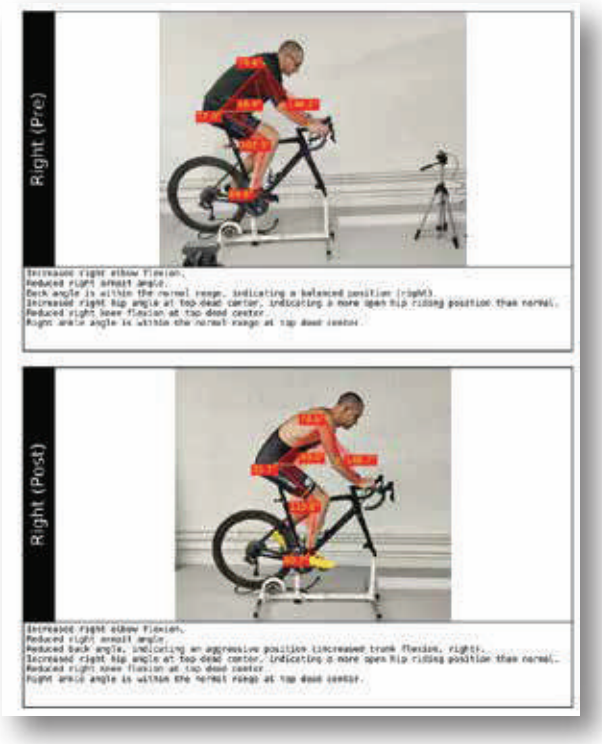
ANTERIOR VIEW

	Right	Left
Pedalling Style	Knee Out	Stable



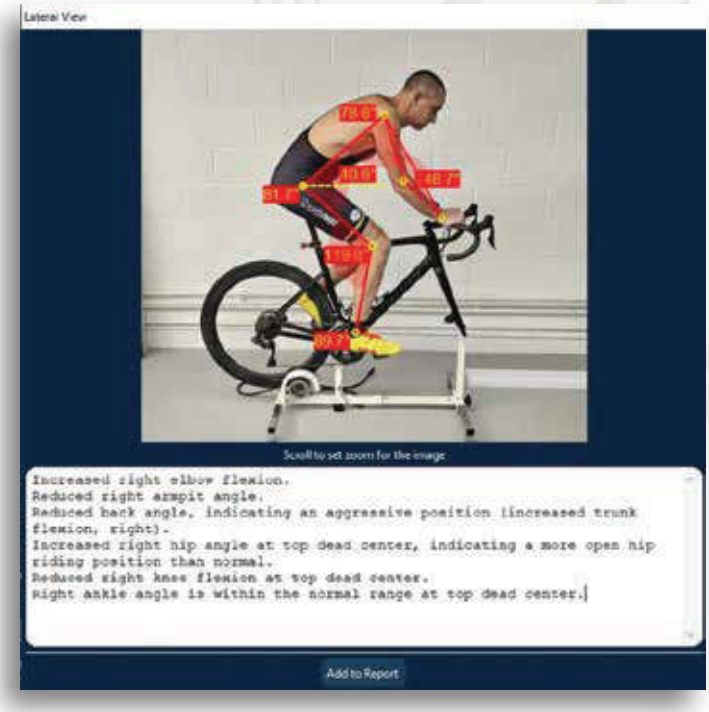
Comparison between **left and right** extremity riding positions.

BIKE FITTING REPORTS : KEY FEATURES



Easy **comparison between different fit** positions.

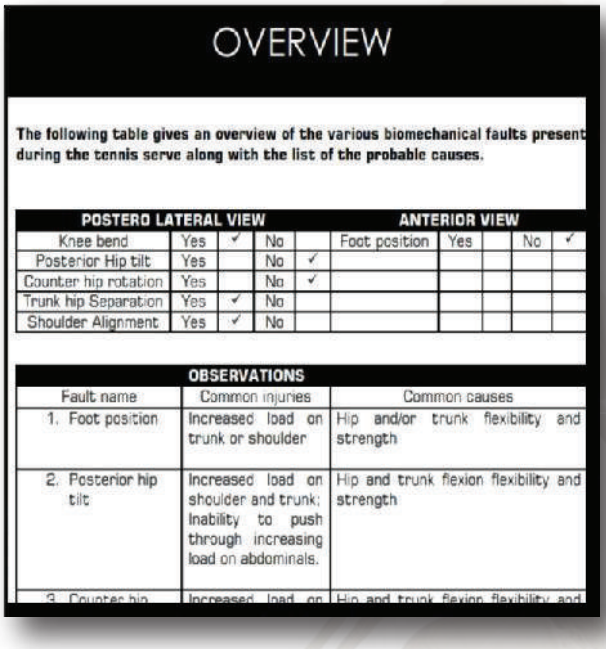
Automatic documentation of notes.



SPORTS SPECIFIC PROTOCOLS

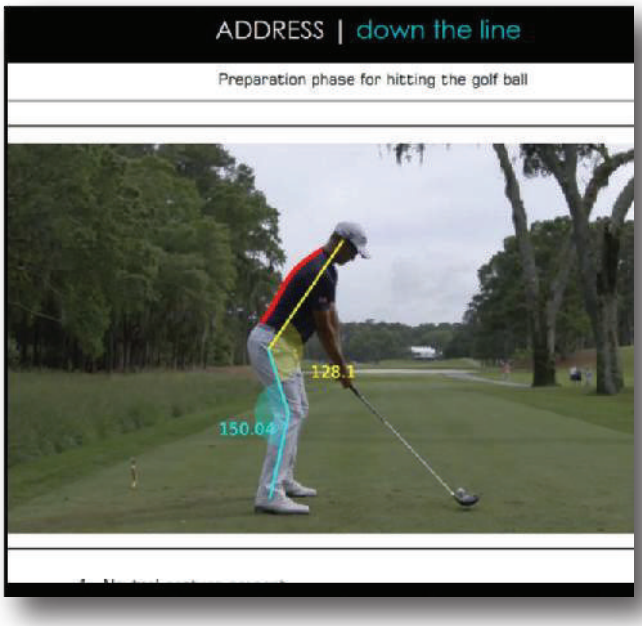
TENNIS SERVE ANALYSIS

Assessment of serve biomechnics

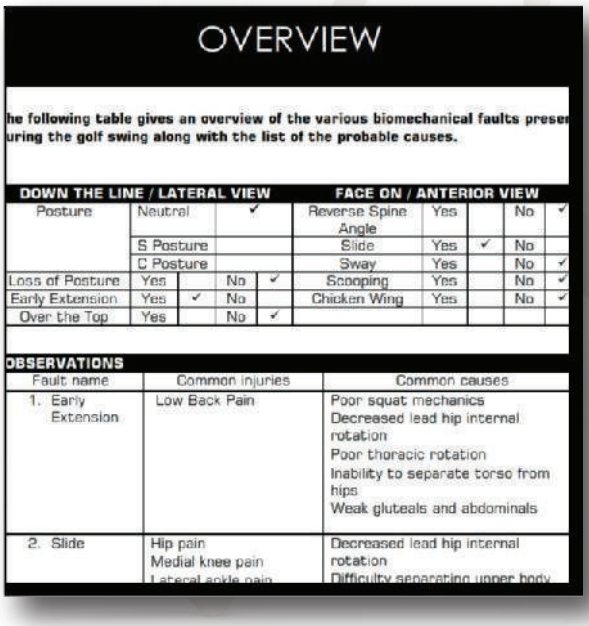


Identification of musculoskeletal problems behind biomechanical faults

GOLF SWING ANALYSIS



Assessment of serve biomechnics



Identification of musculoskeletal problems behind biomechanical faults

GaitON® is used by 500+ clinicians globally for:

1. Diagnosis of posture & gait disorders
2. Pre-post surgical/rehabilitation comparison
3. Monitoring effects of Orthotics/External supporting gear
4. Screening camps at schools/corporates.

TOP REFERENCES

GAIT ANALYSIS

AMRITA HOSPITAL
FARIDABAD
Embrace Good Health

Amrita hospital, Kochi/
Faridabad (India)

SETUP

- 2 Digital Cameras
- Walkway
- GaitON® Software

TOP REFERENCES

GAIT ANALYSIS

Delhi Foot
ORTHOPEDIC EXCELLENCE IN FOOT CARE

Triton Hospital, Delhi (India)

SETUP

- 4 Digital Cameras
- Treadmill
- GaitON® Software

REFERENCES

Adidas

Indian Navy

BSF

Safdarjung hospital

Hawai'i Pacific University

SRM University

Amrita Hospital

Belle Vue Clinic

Col(Dr) Rana K Chengappa
Sports Medicine & Ortho Rehab

Perfect Bounce

Delhi Foot

Sporting Ethos

GaitON®
by auptimo

For a free demo of GaitON,
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