

## **FIND OUT MORE**

Walk3D is available through our certified clinical partners. For details on where to find us, visit:

walk3d.co.uk

### What are people saying about us?

'I am confident that you now have the information you need to help me walk without pain' - Derek Baker, Stockport. Within 6-months of his appointment, Derek was able to walk a round of golf pain-free.

'The Best Gait Analysis' - Runner's World Magazine

'For anyone serious staying injury free and enjoying staying active for life, I'd highly recommend this analysis.' - Fiona Bugler, Journalist

#### **ABOUT RUN3D LIMITED**

We are an Oxford University company, dedicated to bringing gold-standard technology and the latest advances in musculoskeletal medicine to clinicians and their patients.

Proudly associated with/featured by:













DO YOU NEED HELP FOR

## **Hip Osteoarthritis?**

We can help! Our gait and musculoskeletal assessment helps us to identify any movement patterns and asymmetries that may be affecting your ability to walk, which is the first step towards a personalised rehabilitation plan.



#### **HOW WALK3D CAN HELP TREAT YOUR**

# Hip Osteoarthritis

Walking is a privilege often taken for granted until it is marred by pain or discomfort. Walk3D's gait analysis helps us to pinpoint areas that need attention, guiding us towards the optimal intervention(s) for improving your walking pattern.

#### What is Walk3D gait analysis?

Walk3D gait analysis is an advanced way of measuring how your joints move as you walk. We use special infrared cameras to precisely measure how your pelvis, hips, knees and ankles are moving, and to identify deviations from a typical gait pattern. An objective musculoskeletal examination helps us further understand your biomechanical profile.

Using Walk3D, we establish a clear picture of how you are moving and why you are moving in this way.

## How does this help?

Measuring your walking gait provides us with insight into the cause(s) of any musculoskeletal pain. Using the results of your analysis, we are able to target our treatment and recommend data-driven interventions to address any underlying issues.

The Walk3D analysis gives us the "what" and "why" behind your walking challenges, allowing us to address the "how" with a targeted, effective treatment plan.

Walk3D is the gold standard of gait and musculoskeletal analysis, providing the information we need to identify the root-cause of your pain and/or mobility issues and to recommend data-driven advice and treatment.



### Why Walk3D for Hip Osteoarthritis?

Below are key biomechanical risk-factors associated with hip osteoarthritis. At Walk3D, we objectively assess these factors (and more!), to identify the issues specific to you. This allows us to develop a targeted treatment plan built on the basis of precise data.

#### **Kinematic risk-factors**

- ↑ Pelvic tilt
- $\downarrow$  Hip extension at toe-off
- ↓ Hip flexion peak
- ↓ Knee flexion peak
- ↓ Knee extension peak
  ↑ Ipsilateral trunk lean
- ↑ Pelvic obliquity

- ↑ Pelvic rotation
- ↓ Hip rotation
- ↑ Dorsiflexion at toe-off
  ↓ Overstride (step length)
- ↓ Cadence
- ↓ Walking speed

#### **Musculoskeletal risk-factors**

- ↓ Hip abductor strength
- ↓ Hip extensor strength
- ↓ Hip abduction & adduction range
- ↓ Hip flexion & extension range
- ↓ Hip rotation range
- ↑ Varus knee alignment

#### What happens next?

After your Walk3D analysis, we create an individualised treatment plan, focusing directly on the problem areas that have been identified. This might include specific exercises, physiotherapy, gait re-education, and/or footwear advice.

Your journey to better movement starts with Walk3D. Working together, our scientific, data-driven approach will help identify how to improve your walking and mobility.