



INFORMATION SHEET

What is Run3D?

Run3D is a specialist gait analysis service developed by scientists at The University of Oxford.

Run3D uses state-of-the-art three-dimensional motion analysis technology to accurately measure how a person moves. This information is used to treat existing injuries, prevent injuries from happening in the first place and improve performance.

Small, spherical reflective dots are attached to the patient's body and the three-dimensional positions of the markers are measured using infrared cameras. Run3D has three infrared cameras that record the three-dimensional positions of each marker at a frequency of 200Hz (two hundred times per second).

The three-dimensional positions of the markers are then used to create an exact computer model of the person running. The personalised model is used to accurately calculate the person's joint angles in all three planes of human movement. For example, we measure how much the knee extends and flexes, how much it rotates, and how much it moves sideways.

Run3D then extracts running injury risk factors and key performance indicators from the results and compares these to a database of uninjured controls. This allows us to objectively identify any abnormal patterns in the person's running style. This information is used by the treating clinician to understand the root-cause of an existing injury, reduce running injury risk and/or improve performance.

Run3D uses the same technology as the film and computer game industries use to create their animations.

3D gait analysis is the gold standard of biomechanical assessment, which is used by research institutions and specialist orthopaedic hospitals.

Who is Run3D for?

- Runners and/or walkers with existing injuries
- New runners
- Runners wanting to increase their training volume
- Runners wanting to improve performance
- Those with persistent niggles and/or recurring injuries
- Anyone with pain during walking and/or running
- Triathletes



Do I have to be injured to benefit from a Run3D assessment?

No, a Run3D assessment can identify any biomechanical problems and help prevent the development of potential injuries. It can be especially useful for new runners, those wanting to increase their training volume and those who run very high mileage.

I'm not a runner, do you assess walkers?

Yes, we can assess walking gait in exactly the same way as we assess running, producing excellent data.

Do I have to be referred to you by a doctor or healthcare professional?

No, you do not need to be referred for an assessment at Run3D. Anyone can book an assessment.

I'm already seeing a Physiotherapist for my running injury, can I still come to Run3D?

Yes, Run3D's gait analysis services are designed to complement existing therapies. We also provide a rehab service in house!

How does a Run3D assessment differ from a normal Physiotherapy appointment?

Run3D offers you a unique and specialised service, which uses state-of-the-art technology to measure the way you run in three dimensions. It is unlikely that your physiotherapist has access to the specialist equipment that is required to carry-out an assessment of this type. Our gait analysis service is designed to complement the expertise of other practitioners, such as sports medicine doctors, physiotherapists, podiatrists, and other health care professionals.

How long does it take for a Run3D assessment?

We allow 2 hrs for the Gold assessment.

What do I need to bring to the assessment?

Please bring a pair of shorts, comfortable top to move in, socks and your current running/walking shoes. Running leggings may also work.



If you have any insoles, please bring those to your assessment too.

What is the difference between a Run3D assessment and the free assessment provided by my local running shop?

This is almost entirely different as we assess from a true biomechanics perspective with far superior detail using tested scientific equipment. Research has shown that only three-dimensional assessments are accurate enough to detect the small movement patterns that might cause a running injury. Since most running shops use a camera on their phone or tablet and generally have little to no medical training, they can only measure your biomechanics in a very basic way which is often inadequate for carrying out an accurate biomechanical assessment. At Run3D, we use three very highly specialised infrared cameras to capture your biomechanics in three dimensions. We offer a very specialised service and use the most advanced three-dimensional clinical motion analysis that is available at this time.

Run3D Gold Assessment Summary

The Gold Assessment includes a 3D gait analysis AND objective musculoskeletal testing of strength, flexibility, alignment and function.

The results of the gold analysis give a clear picture of the patient's gait and biomechanical function and are used to provide evidence-based recommendations (e.g., physiotherapy, exercises, podiatry, further treatment, gait retraining and more).

What do I get?

A detailed report of running gait (as for the silver) as well as an in-depth objective analysis of musculoskeletal function, and performance indicators. We use hand-held dynamometers to accurately measure strength, we use goniometers to assess flexibility and joint range of motion from the hip down, assessing alignment and function, all measured objectively and compared to our uninjured controls in the same way as the gait data in order to identify asymmetries, weaknesses and detrimental features. The session includes advice and recommendations based on the results with a plan going forwards (please note: patients sometimes require return sessions).

How long does it take?

Allow 2 hours

Run3D Platinum Assessment Summary

The platinum assessment includes everything from the Gold Assessment and in addition, includes use of the RS Footscan force and pressure analysis of foot function and foot biomechanics.

PLATINUM SERVICE includes everything the Gold Assessment includes and in addition, the use of the RS Footscan force & pressure gait analysis of foot biomechanics. The force plate is used by professional clubs and is built with thousands of sensors to accurately measure foot function and help understand biomechanical contributions towards pain/injury. Furthermore, a detailed look at foot biomechanics and an assessment for orthotics.

We go through the findings in a simple to understand way and plan what the best option is going forwards.

We also offer the Footscan as a stand-alone service, too, as well as part of our Biomechanical/Musculoskeletal consultation & assessment.

Please contact for more details and we welcome coming in to the clinic for an informal chat prior to your assessment.

How long does it take?

Allow 3-3.5 hrs

Call or email:

07516 425748 hello@rs-podiatryclinic.co.uk

RS *Podiatry*
CLINIC
LOWER LIMB & GAIT SPECIALISTS