

Gait Analysis & Biomechanical Assessments in Cheshire – Expert Care at Weaver Physiotherapy

At Weaver Physiotherapy & Sports Injury Clinic in Northwich, Cheshire, we believe that how you move tells the story of your health, performance, and injury risk. If you suffer from recurring injuries, joint pain, running discomfort, or problems with your feet, knees, hips, or back, a gait analysis and biomechanical assessment could provide the missing link to a long-lasting solution.

With over 70 years of combined clinical experience, our expert physiotherapists and sports injury specialists use advanced technology, in-depth movement analysis, and evidence-based assessments to get to the root cause of your pain. By understanding your body's biomechanics, we can design a personalised treatment and rehabilitation plan that helps you move better, stay active, and avoid future setbacks.

In this blog, we'll explain:

- What gait analysis and biomechanical assessments are
- Why they are essential for injury prevention and performance
- The most common issues they uncover
- How Weaver Physio carries out assessments
- Who can benefit (runners, athletes, office workers, and more)
- How personalised rehab, orthotics, and physiotherapy can transform your movement

What Is Gait Analysis?

Gait analysis is the study of how you walk and run. Everyone has a unique walking and running style influenced by their anatomy, strength, flexibility, footwear, and injury history. Even subtle imbalances can cause excessive stress on muscles, tendons, and joints, leading to pain or injury.

At Weaver Physio, we use video gait analysis and movement screening to examine:

- Foot strike pattern (heel, midfoot, or forefoot)
- Step length and cadence
- Pelvis and hip control
- Knee alignment and tracking
- Ankle and foot mechanics
- Upper body posture and arm swing

This in-depth analysis helps us identify inefficiencies or faulty movement patterns that may be contributing to your pain or limiting performance.

What Is a Biomechanical Assessment?

A biomechanical assessment looks beyond your running or walking gait to consider how your whole body moves. It includes testing:

- Joint mobility (ankles, hips, knees, spine)
- Muscle flexibility and strength
- Balance and stability
- Foot structure (flat feet, high arches, pronation or supination)
- Functional movements like squats, lunges, and single-leg balance

By combining gait analysis with a full biomechanical assessment, we can identify not only what your body is doing, but why it is happening.

Why Are Gait & Biomechanical Assessments Important?

Many people treat pain by focusing only on the sore area, but often the problem originates elsewhere in the body. For example:

- Knee pain may be caused by hip weakness or poor ankle mobility.
- Plantar fasciitis may stem from tight calves or an unstable pelvis.
- Lower back pain can develop from poor foot mechanics or weak glutes.

A detailed assessment ensures we find the root cause of your pain, not just treat the symptoms. This prevents recurring injuries, improves long-term outcomes, and enhances athletic performance.

Common Problems Detected in Gait & Biomechanical Assessments

Through our experience at Weaver Physio, we frequently see patterns such as:

- Overpronation (feet rolling in) – linked with plantar fasciitis, shin splints, knee pain.
- Supination (feet rolling out) – linked with ankle sprains, IT band syndrome.
- Hip drop or pelvic instability – often causing runner's knee, hip bursitis, lower back pain.
- Poor knee tracking – linked with patellofemoral pain and cartilage issues.
- Reduced ankle mobility – a risk factor for Achilles tendinopathy and calf strains.
- Muscle imbalances – such as weak glutes, tight hamstrings, or overactive quads.

Identifying these issues early can save months of pain, unnecessary scans, and time away from training.

Who Benefits from Gait & Biomechanical Assessments?

Runners & Athletes

Running places repetitive load on the body. Small biomechanical faults can lead to big problems when multiplied by thousands of steps. Gait analysis helps runners avoid injuries like shin splints, Achilles pain, stress fractures, and IT band syndrome.

Office Workers

Sitting for long hours affects posture, muscle balance, and walking mechanics. Assessments often reveal weak glutes, tight hip flexors, and altered gait, which can lead to back, hip, and knee pain.

Children & Teens

Growing bodies can develop postural or movement issues. Early assessment prevents long-term musculoskeletal problems and supports healthy development.

Older Adults

Ageing changes movement patterns, balance, and joint loading. Assessments help prevent falls, maintain independence, and manage conditions like arthritis.

People with Foot or Shoe Problems

If you struggle to find comfortable footwear, suffer from corns, bunions, or heel pain, biomechanical assessment helps identify underlying causes and whether orthotics could help.

How Weaver Physio Performs Gait & Biomechanical Assessments

At Weaver Physiotherapy in Northwich, we follow a structured, evidence-based process:

1. History & Discussion

We start by listening – your injury history, lifestyle, footwear, training load, and goals.

2. Movement Screening

Functional tests such as squats, lunges, and single-leg balance identify weaknesses and compensations.

3. Video Gait Analysis

Using treadmill running and walking with video feedback, we examine your stride in detail.

4. Joint & Muscle Testing

We check flexibility, strength, and mobility to understand the root cause of inefficiencies.

5. Diagnosis & Explanation

We explain your results clearly, showing video feedback and highlighting areas for improvement.

6. Personalised Plan

Based on your results, we design a plan including exercise rehab, footwear advice, manual therapy, or orthotics if needed.

Treatment Options Following Assessment

A gait and biomechanical assessment is just the beginning. At Weaver Physio, we combine findings with tailored treatments such as:

- Exercise rehabilitation – strength, mobility, and balance training.
- Manual therapy & sports massage – releasing tight muscles and restoring function.
- Shockwave therapy – for chronic tendon injuries.
- Acupuncture & dry needling – reducing pain and improving movement.
- Custom orthotics – if structural support is required.
- Running coaching advice – cadence, stride, and footwear guidance.

This integrated approach ensures lasting results, not just quick fixes.

The Role of Orthotics in Biomechanics

Sometimes, footwear or insoles are needed to correct underlying issues. Custom orthotics can:

- Reduce stress on painful joints
- Correct abnormal foot posture
- Improve shock absorption
- Prevent overuse injuries

At Weaver Physio, orthotics are only recommended when essential and always combined with exercise and rehab to address the root cause.

Gait Analysis for Runners – The Runner's MOT

At Weaver Physio, our popular Runner's MOT combines full gait analysis with strength, flexibility, and injury risk testing. Designed for runners of all levels, it helps:

- Detect inefficiencies in running style
- Reduce injury risk
- Improve running economy
- Build a tailored performance and rehab plan

This is especially valuable for runners training for events like the Cheshire 10K, Manchester Marathon, or local Parkruns in Northwich and Knutsford.

Why Choose Weaver Physio for Your Assessment?

- ✓ 70+ years of combined clinical experience
- ✓ Chartered Physiotherapists & BASRaT Sports Rehabilitators
- ✓ Advanced technology including video gait analysis
- ✓ Evidence-based, personalised treatment plans
- ✓ Trusted by athletes, local clubs, and the Cheshire community
- ✓ Convenient location in Northwich, serving Knutsford, Winsford, Middlewich, Tarporley & Frodsham

At Weaver Physio, we don't just assess your movement – we give you the tools to move better, recover stronger, and stay pain-free.

FAQs – Gait Analysis & Biomechanical Assessments

1. Do I need to be a runner to benefit from gait analysis?

No. Anyone experiencing recurring pain, poor posture, or difficulty walking can benefit.

2. How long does an assessment take?

Typically 60–75 minutes, depending on complexity.

3. Will I need special shoes or equipment?

We may advise on footwear, but most assessments use your current shoes.

4. Can it help prevent injuries?

Yes – many injuries are avoided once movement faults are corrected.


5. Do you provide follow-up treatment?

Absolutely. We create a personalised plan including physio, rehab, massage, or orthotics if needed.

Book Your Gait & Biomechanical Assessment Today

If pain, stiffness, or recurring injuries are holding you back, it's time to look deeper into how your body moves. A gait analysis and biomechanical assessment at Weaver Physiotherapy in Northwich could be the key to unlocking pain-free movement, faster recovery, and improved performance.

 Serving Northwich, Knutsford, Winsford, Middlewich, Tarporley & Frodsham

 Call 01606 227484

 Book online at <http://weaverphysio.com>

Weaver Physio – Helping Cheshire stay active, strong & pain-free