

The clinical significance of the Alter G Anti-Gravity Treadmill is enabled by manipulating differential air pressure; creating a pressurised lifting force to **decrease the impact of gravitational forces and body weight during locomotion**. As a result, ground reaction forces are minimised and the associated muscles work at a safer, less strenuous level to attenuate forces

**The Alter G appeals to any individual who has difficulty or reduced capacity related to full weight bearing during ambulation or exercise.** Alongside smaller ground reaction forces, the gravitational load can be reduced from 100% to as low as 20% of body weight, allowing us to target biomechanical insufficiencies and maintain cardiovascular fitness without overloading the patient.



**NEUROLOGIC** - Similarly, gait training using the Anti-Gravity treadmill appeals to the majority of neurological pathologies, improving the motor learning of kinematics that favour functional improvements; seen especially in Parkinson's Disease, Cerebral Palsy, Cerebrovascular Accidents, and Traumatic Brain Injury.

**ORTHOPAEDIC** - As it offers an alternative for weight-bearing exercise, orthopaedic patients see significantly reduced symptoms without compromising joint integrity; favouring osteoarthritis. **CARDIAC** - There is no significant change in heart rate, systolic blood pressure, diastolic blood pressure and mean arterial pressure associated with cardiac patients; allowing deconditioned clients to participate in treadmill exercise and stress testing. **GERIATRIC** - This heightened safety allows us to target gait kinematics and walking speed in geriatric patients, ultimately improving their balance and functional capacity in activities of daily living.

Consequently, the Alter G Anti-Gravity Treadmill proves to be a clinically significant tool in managing a variety of populations through decreasing physiological strain and heightening safety. With this technology, both the evidence-based research and our clinical experience have demonstrated it to be monumental in an individual's maintenance and improvements in capacity.