Experience More Than Walking

ReWalk is the most studied exoskeleton technology and research shows that standing and ambulation in the ReWalk provides potential health benefits, such as:

Potential Benefit	Summary of Data
Maintenance of bone mass	Walking with the ReWalk exoskeleton generates cyclic compressive loads similar in magnitude and pattern to the loads experienced by able-bodied individuals. These compressive loads may help maintain bone mineral density and decrease the incidence of fragility fractures in paraplegic individuals affected by SCI.
Improved seated balance	ReWalk use results in improved dynamic seated balance, particularly in forward and backward leaning positions. Increased core muscle strength and control may be gained, allowing greater functional independence with activities of daily living.
Better sleep and reduced fatigue	Nighttime sleep disturbances were significantly reduced following ReWalk use. Walking regularly several times per week with the ReWalk also reduced daytime sleepiness and fatigue.
Improved Mental health	The mental outlook for participants in ReWalk clinical trials was significantly improved relative to SCI individuals who did not receive exoskeleton-assisted mobility training.
Reduced pain	External physical manifestations of pain and the impact of pain on daily personal and social activities were reduced after ReWalk user training. Pain may be alleviated by improvements in core muscle strength and body conditioning.
Improved body conditioning	Walking with the ReWalk exoskeleton increased the user's heart rate to a level corresponding with moderate exercise for able-bodied individuals. The aerobic exercise provided by regular ReWalk use several times per week significantly reduced fat mass and total body mass. Lean body mass increased concurrently.
Pressure Ulcers	Upright mobility using the ReWalk exoskeleton provides physical exercise involving the entire body and allows full relief of back, buttock and leg skin pressure. Regular use of the ReWalk may help promote skin blood circulation and reduce the incidence and severity of pressure ulcers.
Improved bowel function	ReWalk exoskeleton-assisted mobility was beneficial in improving bowel function for most users regardless of variations in level of injury, length of injury, age, and sex. Time spent on bowel management was reduced, along with the need for medical or manual bowel stimulation.
Improved bladder function and reduced risk of urinary tract infection (UTI)	Bladder complications and management difficulties were significantly decreased following ReWalk use. Upright mobility may assist with more complete bladder voiding, helping to decrease the risk of UTI. The aerobic exercise provided by regular ReWalk use, leading to improved body conditioning and better seated balance, may also lower the incidence of UTIs.

Summary table from *Medical Benefits of the ReWalk Exoskeleton* prepared by Mary Beth Schmidt, Ph.D.