

# Motor-Cognitive Training for Gait Rehabilitation and Fall Prevention

By adding a virtual reality experience to existing treadmills, GaitBetter's evidence-based digital therapeutic enables affordable, personalized and safe training for effective and improved outcomes

**USE YOUR  
HEAD TO KEEP  
MOVING  
FORWARD**



*“We find the GaitBetter virtual reality environment very engaging and motivating for our patients. As an example, we are able to double the walking dosage for patients utilizing GaitBetter versus walking over ground or using the treadmill alone. This allows us to achieve best practice and stepping goals when gait training our patients. ”*

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## State-of-the-Art Gait Therapy

- Suited for multiple indications, conditions, and wellness in older adults
- Used in inpatient, outpatient, rehabilitation, senior centers, and senior living
- Motor-Cognitive gait training and analysis
- Auto and manual personalization options
- Fun and enjoyable
- Simulates everyday challenges ('real-world' experience)
- Universal add-on to existing treadmills
- Affordable and flexible pricing plans

## Evidence Based Solution

GaitBetter's cognitive-first methodology has been proven through clinical trials, real-world usage, and academic research. The GaitBetter technology significantly improves gait and cognitive skills and reduces risk of falls.

20 peer-review publications:

BMC Neurology

SAGE journals

The Journals of  
GERONTOLOGY

Taylor & Francis Online

Neurology

THE LANCET

PTJ Physical Therapy &  
Rehabilitation Journal

Cochrane  
Library

MULTIPLE  
SCLEROSIS

International Parkinson and  
Movement Disorder Society



## An Innovative Motor-Cognitive Intervention

Developed by neuroscientists, physical therapists, software engineers, and experts working with elderly - GaitBetter™ brings proven incredible results.

Using a proprietary AI-based tracking algorithm, GaitBetter™ analyzes feet movement in real-time and projects these movements onto a virtual environment displayed on a front screen.

Trainees are walking on the treadmill and see their own two feet in the simulation. As they walk, they face virtual obstacles to improve gait while performing complex tasks requiring attention, concentration, planning and execution to enhance motor-cognitive skills.

## Training Component



### MOTOR

Gait speed  
Step length / Clearance  
Endurance  
Dynamic balance  
Symmetry  
Variability



### MOTOR-COGNITIVE

Obstacle  
Negotiation  
Motor Planning  
Balance Strategies



### COGNITIVE

Multitasking  
Memory  
Response time  
Attention  
Environment sensory  
input processing



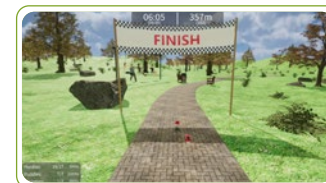
### Real Time Feedback

GaitBetter™ provides real-time feedback to trainees related to their obstacle negotiation success, gait pattern, and decision making for enhanced motor learning.



### Multitask Training

Negotiating obstacles during treadmill walking while attending to cognitive demanding tasks improves gait measures and executive functions skills.



### Fun and Engaging

Gamification in a semi-immersive virtual reality boosts the users motivation and adherence, leading to increase in walking and therapy dosage.

## Easy-to-Use, Safe and Delivers Fast Results

- Intuitive to operate, touchscreen dashboard for easy operation
- Pre-built and validated training programs with customization options
- Results within 6 to 7 training sessions
- Tracks history and patients progress over time
- Proprietary safety harness for quick patient setup and comfort



TIME	DATE	SESSION	USER	SPEED	DISTANCE	ATTENTION	BALANCE
10:00	10/10/2023	1	John	3.5	11	85	90
10:15	10/10/2023	2	John	3.5	11	85	90
10:30	10/10/2023	3	John	3.5	11	85	90
10:45	10/10/2023	4	John	3.5	11	85	90
11:00	10/10/2023	5	John	3.5	11	85	90
11:15	10/10/2023	6	John	3.5	11	85	90
11:30	10/10/2023	7	John	3.5	11	85	90
11:45	10/10/2023	8	John	3.5	11	85	90
12:00	10/10/2023	9	John	3.5	11	85	90
12:15	10/10/2023	10	John	3.5	11	85	90
12:30	10/10/2023	11	John	3.5	11	85	90
12:45	10/10/2023	12	John	3.5	11	85	90
13:00	10/10/2023	13	John	3.5	11	85	90
13:15	10/10/2023	14	John	3.5	11	85	90
13:30	10/10/2023	15	John	3.5	11	85	90
13:45	10/10/2023	16	John	3.5	11	85	90
14:00	10/10/2023	17	John	3.5	11	85	90
14:15	10/10/2023	18	John	3.5	11	85	90
14:30	10/10/2023	19	John	3.5	11	85	90
14:45	10/10/2023	20	John	3.5	11	85	90

## Requirements

### Room space:

Up to ~2 feet (60cm) from front of treadmill

### Electricity:

With (provided) UL/ETL power strip: 1 outlet up to 6 feet away from the treadmill.

Without power strip: 3 outlets, up to 3 feet away from the treadmill.

### Treadmill Type:

Recommended belt width: at least 18.9" (48cm)

Recommended belt length: at least 56.7" (144cm)

## Specifications

### System cabinet:

Width: ~19.7" (50cm)

Depth: 9.85" (25cm)

### Harness bridge:

Height: 90.5" (230cm)

Width: 31.5" – 47.3"

(80 – 120cm)Max.

Weight: 550 lb. (250kg)

### Harness:

Standard: EN361

Size: L and XL available.

