

Think & Move **WELL**



Your Brain Performs Best in Motion

Why **Dual-Task Training** Is the Key
to Resilient Human Performance



📍 71677 Riverside Drive Covington, LA 70433

🌐 www.millenniumhealthandfitness.com ☎ 480.758.5115



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Introduction

Most jobs require people to think and move at the same time. A Soldier may move through terrain while listening for instructions over the radio. A healthcare professional might walk between patient rooms while processing new information and responding to colleagues.

In other words, **people rarely move without thinking or think without moving.**

Yet many modern routines separate these systems. Work often requires prolonged sitting and mental focus, while physical training is frequently designed around movement alone. Even many wellness programs treat cognitive health and physical health as separate areas of development. Organizations might offer a presentation on brain health or stress management during the workday, and separately promote a step challenge, fitness class, or gym membership.

While each of these efforts can be valuable on their own, day-to-day endeavors rarely separate thinking and movement so neatly. High-performing environments – especially tactical and operational ones – require people to move, process information, communicate, and make decisions simultaneously, and often under pressure.

Research increasingly shows that training cognitive and physical demands together can improve coordination, attention, and adaptability more effectively than training either system alone.¹

Put simply, resilience is not built by training the mind and body separately. It develops when both systems learn to work together. This is where dual-task training comes in.

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Millennium Health & Fitness Vice President, **Leo Legidakes**, showcases dual-tasking by cycling while engaging in a memory challenge.

“ **Dual-tasking means performing a physical task and a cognitive task simultaneously.** ”

What Dual-Tasking Actually Means (And What It Doesn't)

In research settings, dual-tasking is defined as performing two tasks that can be measured independently and have distinct goals.² In simpler terms, it often means **performing a physical task and a cognitive task simultaneously**.

However, not every complex movement counts as dual-tasking. For example:

- Walking while carrying a backpack is still considered a single physical task.
- Carrying a suitcase while walking is also a single physical task.

Dual-tasking occurs when movement is paired with a **separate mental demand**, such as:

- Walking while recalling information or answering questions
- Maintaining balance while responding to verbal cues
- Performing agility drills that require reacting to unexpected signals
- Navigating an environment while processing instructions

Even everyday situations reflect dual-tasking: walking while answering a question, taking a drink of water while running, or opening a backpack while continuing a conversation. In those moments, the brain is coordinating attention, movement, and decision-making at the same time.

At first, performance in both areas may slow slightly. You might notice yourself walking more carefully while answering a question or pausing for a moment before responding. This is normal. The brain is learning to allocate attention across multiple demands.

Over time, training under these conditions can strengthen the brain's ability to coordinate thinking and movement together, helping individuals maintain focus and control even when multiple demands occur at once – **a key component of resilient human performance**.

Why Dual-Task Training Matters in the Real World

For many professionals, the challenge to perform is rarely a lack of strength or knowledge alone. The challenge is **managing multiple demands at once**.

- A firefighter may move through a structure while monitoring air supply and listening for directions from a team leader.
- A supervisor conducting a facility walkthrough may climb stairs, inspect equipment, and identify safety concerns while discussing operational decisions.
- A warehouse manager may walk the warehouse floor while reviewing equipment status and responding to questions from their team.

These situations require strong **executive functioning**: the mental skills that help people focus attention, manage competing demands, plan actions, and stay flexible when conditions change. In other words, the ability to manage several demands at once is not just helpful; it is often essential for doing the job well.

Research shows that both physical exercise and cognitive training can improve executive functioning.³ When these demands are combined with dual-task training, the brain is challenged to coordinate them simultaneously.⁴ A recent review of cognitive interventions even found that dual-task training may produce some of the largest effect sizes among interventions designed to **improve cognitive performance**.⁵

Over time, individuals participating in dual-task training may become better able to:

- Maintain attention while moving
- Adjust actions quickly when priorities change
- Manage competing demands
- Remain mentally flexible under stress

These are core components of resilient performance. In many roles, they are also the difference between keeping up with the demands of the job and becoming overwhelmed by them.

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Think WELL

Supports cognitive capabilities such as focus, learning, decision-making, and mental adaptability.



Move WELL

Focuses on physical strength, coordination, balance, and efficient movement.

Where **Think WELL** and **Move WELL** Come Together

Resilience is often described as the ability to adapt, recover from stress, and maintain performance under pressure. In practice, that ability depends on how well the brain and body respond to competing demands. When stress increases, attention can narrow, reaction time may slow, and coordination can be affected.⁶

Within our **WELL Culture** framework, dual-task training sits at the intersection of Think WELL and Move WELL.

- **Think WELL** supports cognitive capabilities such as focus, learning, decision-making, and mental adaptability.
- **Move WELL** focuses on physical strength, coordination, balance, and efficient movement.

When these **WELL Domains** are developed together, individuals become better prepared to maintain focus while moving, shift attention between those competing demands, and make decisions without losing coordination.

For leaders responsible for workforce performance, these capabilities matter. Many roles require employees to process information, communicate with others, and respond to changing conditions while physically engaged.

Dual-task training provides a structured way to build these capabilities by helping individuals practice coordinating cognitive and physical tasks at the same time. By gradually exposing people to multiple demands at once, training environments can better reflect the demands people face during their work. Over time, people can become more comfortable navigating uncertainty, managing competing demands and maintaining performance under pressure.

Where Dual-Tasking Can Be **Built into Everyday Work**

Organizations can begin developing these capabilities by intentionally pairing movement with cognitive demands during training and daily work activities. Dual-task training does not require complicated equipment or highly specialized facilities. It simply involves layering cognitive challenges into physical movement. **For example:**

Walking Meetings with Problem Solving



Teams walking together while discussing project decisions, brainstorming ideas, or reviewing plans. Participants are moving while also processing information, communicating, and solving problems.

Agility Drills with Reaction Signals



In many operational and training environments, individuals are already required to move and respond simultaneously. For example:

- a coach calling out directions during movement drills
- a light or visual signal indicating where to move next
- a number or cue corresponding to a specific movement pattern

These activities require quick decision-making while the body is already in motion, mirroring real-world scenarios where individuals must process information, adjust, and act without stopping.

Balance Tasks with Real Time Decision-Making



Instead of isolating balance as a fitness activity, it can be paired with simple work-related tasks. For example:

- Standing or shifting positions (e.g., staggered stance, light movement) while responding to questions or contributing to discussions
- Alternating positions (sit-to-stand, shifting weight) during conversations that require recall, prioritization, or quick input

These moments require individuals to maintain physical control while actively processing and responding to information.

Workplace Movement with Cognitive Tasks



Employees walk a flight of stairs while discussing next steps in a project, move between work areas while recalling key information, or conduct site walkthroughs while identifying safety issues.

In each case, individuals are practicing the same skills they rely on during the workday: maintaining focus while moving, communicating while managing tasks, and making decisions while responding to changing conditions.

Moving Toward More Integrated Resilience Strategies



As organizations place greater emphasis on human performance and readiness, many are recognizing that traditional approaches to training and wellness often fall short. **Resilience cannot be built through isolated training alone.**

Programs that integrate cognitive and physical development are often better suited to preparing individuals for modern operational environments. Dual-task training is one example of how these systems can be brought together.

At Millennium Health & Fitness, our WELL Culture is built around this integrated, whole-person approach to well-being and performance. Think WELL and Move WELL are designed to reinforce one another, helping individuals develop the attention, coordination, and adaptability required in demanding environments.

If your organization is exploring ways to strengthen resilience, improve human performance, or design training environments that better reflect real-world demands, our team can help translate these concepts into practical, evidence-informed strategies that support both human performance and organizational readiness.




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