

Using interactive technologies to engage older adults in exercise habits for improved balance and aging-in-place

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#### **About Us**

- Founded in 2012 to promote therapeutic exercise by making it more engaging.
- Through video-games and motion sensing, our technology transforms therapeutic exercise into an exciting interactive experience.
- Our flagship product is a cutting-edge interactive kiosk that is used in over 350 rehab facilities around the world
- Our newest program, LudoFit, aims to make our high-end technology accessible and affordable to everyone.





### **Benefits of Exercise Games**

Healthy aging is a mind-body effort. Studies have shown that "exergaming" not only <u>increases exercise adherence</u>, but is also associated with <u>improved cognitive function</u>.



















# **How it works**

Step 1



**Download the App** 

Download LudoFit onto your Windows PC, Mac or iPad Step 2



Take a 30-second test

A quick strength test personalizes the exercise video games to your fitness level. Step 3



**Start your exercises** 

Enjoy different LudoFit games as often as you'd like. As you get better, the games get harder. Step 4



**Track your progress** 

Take a look at your dashboard to see how you're improving.



### **Pilot with Fraser Health**

LudoFit was provided to participants at their Fall Prevention clinic. 10 Participants used LudoFit. The pilot is still in progress, but here's what participants Sheryl and Lilian had to say:

**Sheryl**: "When we heard about it through Fraser Health, We were quite excited. It's something you could do in your house and gives you the same ability to exercise without a something and having to be with a bunch of people. I would describe it as a really cool workout app that instead of doing normal exercises like classes, you go rock climbing or ride a bike or skiing. It's a game you're playing that's the exercise you're doing. It is a vital resource."

**Lilian**: "I do it 2-3 times per week. I think it is helpful, and it is also fun. I enjoy it. I like that I am doing things that are helpful to me physically, and it is fun doing it, and it's not a chore. It asks you how you feel and adjusts the challenge."



## **Driven by the Evidence**

The exercise content for LudoFit is primarily based on two clinically-proven fall-prevention programs:

- Tai Chi: Moving for Better Balance (shown to reduce falls by 55% 1)
- Otago Fall Prevention program (shown to reduce falls by 35%<sup>2</sup>)

Clinical goal	Exercise	Evidence	LudoFit Content
Postural awareness	Diaphragmatic breathing	Tai Chi: Moving for Better Balance	Messaging in all activities
Hip strength	Squats	Otago Fall Prevention program	Ski the Italian Alps Explore the Egyptian Temple
General Balance	Reaching inside and outside base of support	Tai Chi: Moving for Better Balance	Rock Climbing in Thailand New Zealand Adventure Kayaking in Chile
Static standing balance	Weight shifting	Tai Chi: Moving for Better Balance	Ski the Italian Alps
Dynamic standing balance	Side-stepping	Otago program	Rock Climbing in Thailand Explore the Egyptian Temple
	Walking in place	Otago program	Cycling the Tour de France
Core strength	Trunk lateral flexion	Tai Chi: Moving for Better Balance	New Zealand Adventure White Water Rafting
Cardio	Walking in place	Otago program	Cycling the Tour de France
Dual Tasking	Spaced retrieval memory training	Numerous clinical studies	Explore the Egyptian Temple





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