

The Effects of Unilateral Leg Immobilization on Muscle Strength, Size, and Activation

What are the effects of leg immobilization by a knee brace and ankle boot on muscle strength, size and activation of leg muscles?

If this question interests you, we are currently seeking volunteers (age 18 and older) for a research study examining declines in muscle function with disuse, and why and how these effects occur in the legs, as the findings can have important application for physical rehabilitation.

If you choose to participate, you will be asked to wear a knee brace and ankle boot on your left leg for two weeks. The knee brace and ankle boot will prevent you from moving your knee and ankle joints, and you will walk using crutches. We will measure your muscle strength, activation, and size through MRI scans before and after immobilization. We will also use electrical stimulation to generate small twitches in your muscles.

You will receive an Honorarium for participating in this research.

The total study duration is 14 days. Your time commitment for testing sessions will be approximately 10 hours over the 14 days. If you would like more information or are interested in participating, please contact:

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