



Advancing physical activity knowledge and participation  
among Canadians living with spinal cord injury.

## **At Home Strength-Training for People with SCI**

### ***Purpose***

To determine the success of a home-based introductory strength-training visit aimed to increase thoughts and feelings about strength-training activity, and strength-training behaviour itself, among people with SCI.

### ***Summary***

- People had more motivation to do strength-training exercise.
- People did more strength-training exercise.
- A home visit with an exercise professional and someone with SCI may help people with SCI begin and stick with strength-training exercise.

### ***Possible applications***

For people with SCI, these results show that:

- Strength-training exercise does not need to be done in a gym setting to work.
- Learning strength-training exercise with an exercise professional and someone else with SCI may help you to stick to the exercise routine.

### ***Research abstract: Active Homes***

In a recent study, only one third of Canadians with spinal cord injury (SCI) reported regular strength training activity. Barriers to physical activity, such as lack of resources, knowledge, confidence and accessible facilities, often impede regular physical activity participation for people with SCI. Theory posits that targeting increases in self-efficacy (self-confidence for a particular task) help in overcoming barriers to physical activity. Four sources of self-efficacy are mastery experience (personal experience), vicarious experience (watching similar others), social persuasion (influenced by others), and physiological factors. Thus, the objective of this theory-based pilot study was to examine the effectiveness of peer-mediated, home-based introductory strength training for people with SCI. A fitness professional and a peer with SCI visited the homes of 11 people with paraplegia, not currently involved in strength training (54.5% women). The visit targeted sources of self-efficacy while introducing participants to strength training and a personal training plan, with resources. It was hypothesized that after this Active Homes Visit, participants would have increased self-efficacy, intentions, planning and strength training behaviour. Task and self-regulatory self-efficacies, intentions, planning and moderate-heavy strength-training behavior were assessed one week before, and two and four weeks following the visit. Separate paired *t*-tests indicated that over time, intentions ( $p < .05$ ), planning ( $p < .05$ ) and strength-training ( $p < .10$ ) increased, but self-efficacies did not. Based on the results from this pilot study, a single, peer-mediated, home-based visit holds promise for promoting strength training behaviour among people with SCI.

**Latimer, A. E., Brawley, L. R., Martin Ginis, K. A., Prapavessis, H. & Tomasone, J. *Active Homes: A preliminary evaluation of a peer-mediated, home-based strength training session for people with paraplegia.* Poster presented at the annual meeting of the Canadian Society for Psychomotor Learning and Sport Psychology, Ottawa, Ontario, October 28-30th, 2010.**