



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

## **People with SCI may not get enough vitamins, fiber and calcium**

### ***Purpose***

To study diets of people with SCI.

### ***Summary***

- Canadians with SCI did not have a balanced diet.
- Only half of participants took a nutrition supplement in the past 24 hours.
- Canadians with SCI did not get enough vitamins, calcium, fiber & potassium on a daily basis.

### ***Possible Applications***

- It is important for people with SCI to get the vitamins and nutrients they need.
- Speak to your doctor or dietician to make sure you follow a balanced diet, and get enough nutrients and vitamins daily.

### ***Research Abstract***

#### ***Evidence of dietary inadequacy in adults with chronic spinal cord injury***

**Objective:** Estimate prevalence of inadequate dietary intakes in community-dwelling men and women with chronic spinal cord injury (SCI).

**Methods:** In-home interviewer administered multiple-pass 24-h recalls were collected at baseline (n1/477) and at 6 months (n1/468). Dietary intake (adjusted to remove intra-individual variation) was compared with the dietary reference intakes (DRIs), specifically the estimated average requirement, adequate intake (AI) and acceptable macronutrient distribution ranges (AMDR).

**Results:** Macronutrient intakes, as percentages of daily energy, for men (16% protein, 52% carbohydrate, 30% fat) and women (17% protein, 53% carbohydrate, 28% fat) were within the AMDR. Despite this, inadequate intakes for men (n1/463) and women (n1/414) were determined for vitamin A (92 and 57%), magnesium (89 and 71%), folate (75 and 79%), zinc (71 and 29%), vitamin C (52 and 14%), thiamine (22 and 14%), vitamin B12 (6 and 29%), riboflavin (5% men) and vitamin B6 (24% men). Mean usual intakes of fiber, vitamin D, calcium and potassium fell below the AI for men and women. In all, 53% of participants consumed a micronutrient supplement in the previous 24h at baseline and at 6 months, specifically, calcium (29, 19%), multivitamin (26, 25%), vitamin D (22, 12%) and vitamin C (9, 6%).

**Conclusion:** Our results show numerous nutrient inadequacies, relative to the DRIs, for men and women with SCI. This study has important implications for clinical dietetic practice in the SCI population.

**Walters JL, Buchholz AC, Martin Ginis KA, & The SHAPE-SCI Research Group. Evidence of dietary inadequacy in adults with chronic spinal cord injury. *Spinal Cord*, 47, 318-322.**