Development of scientific exercise guidelines for adults with spinal cord injury

1. Systematic review
Systematic review of every published study testing effects of exercise on fitness, cardiometabolic health and/or bone health among adults with spinal cord injury (SCI).
- 13,115 studies identified and screened
- 211 studies relevant to the review
- 189 studies of adults with chronic SCI
- 22 studies of adults with acute SCI
Evidence synthesised and guideline recommendations drafted.

2. International panel meetings
Evidence synthesis and draft guidelines deliberated at three expert panel meetings:
- European (UK)
- Canadian (Toronto)
- International (Kelowna, BC)
Panels included scientists, clinicians, people with SCI and organisations that represent people with SCI.

3. Scientific guidelines
Fitness
For cardiorespiratory fitness and muscle strength benefits, adults with SCI should engage in at least:
- 20 minutes of moderate to vigorous intensity aerobic exercise 2 times a week
- 3 sets of strength-training exercises for each major functioning muscle group, at a moderate to vigorous intensity 2 times a week

Cardiometabolic health
For cardiometabolic health benefits, adults with SCI are suggested to engage in at least:
- 30 minutes of moderate to vigorous intensity aerobic exercise 3 times a week

4. Market research
In an online survey and during workshop discussions, adults with SCI and SCI clinicians rated the guidelines favourably in terms of:
- Appropriateness
- Utility
- Clarity

5. Patient and public involvement
Work with community members and stakeholders to:
- Translate scientific guidelines into local clinical and community practice guidelines
- Disseminate guidelines internationally

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