

# First Nations, Inuit and Métis peoples and Physical Activity during COVID-19

**Heather Foulds**

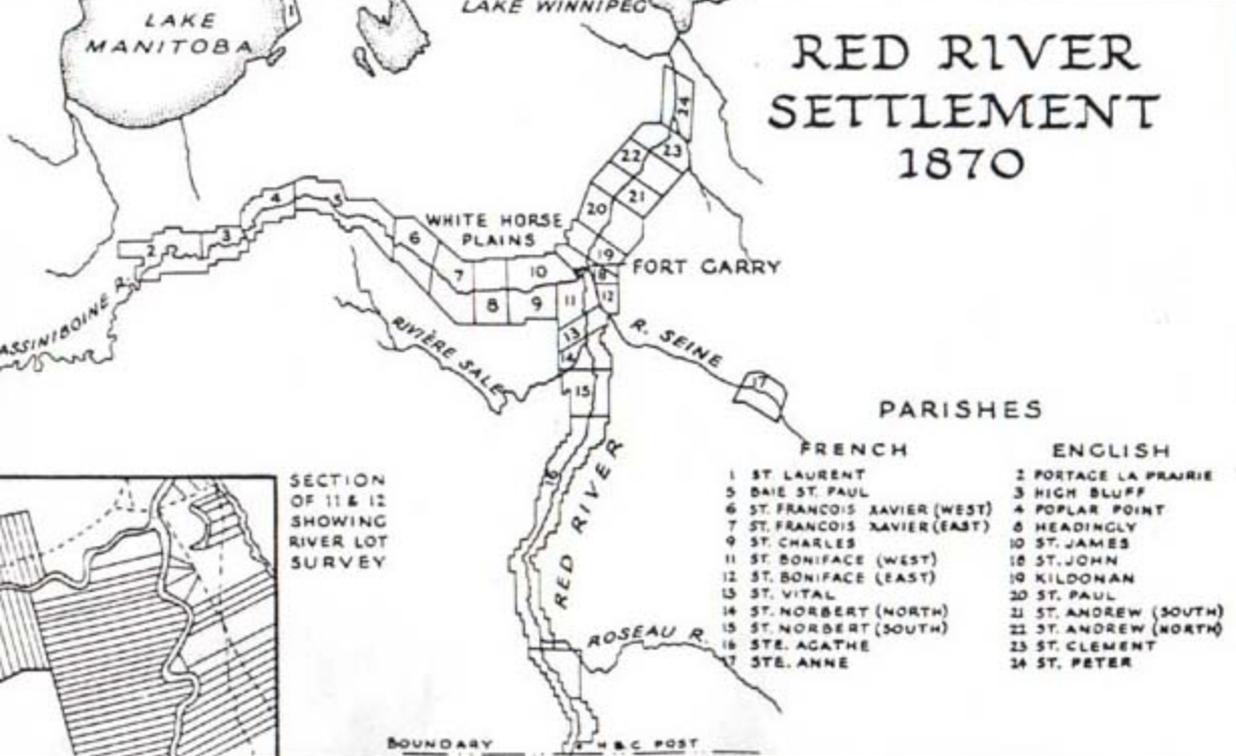
**Heart & Stroke/CIHR Early Career Indigenous Women's  
Heart and Brain Health Chair  
University of Saskatchewan**

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Chuck Chin, Sept. 27, 2019

Archives of Manitoba, [https://www.umanitoba.ca/canadian\\_wartime/grade6/module3/settlement\\_1870.shtml](https://www.umanitoba.ca/canadian_wartime/grade6/module3/settlement_1870.shtml)

Google Maps, <https://www.google.com/maps/dir/Bresaylor,+SK/Langmeade+Church+%26+Graveyard,+Turtle+River+No.+469,+SK+S0M+2J0/@52.9165582,-108.7711113,10z/data=!4m1!4m1!1s0x530898cb8de310fd:0x62c251224612f864!2m2!1d-108.763651!2d52.968489!1m5!1m1!1s0x53089c1a7603be59:0x2737d0c3308e41e8!2m2!1d-108.783959!2d53.038167!3e2>

<https://www.google.com/maps/place/1125+Cartier+Ave,+Coquitlam,+BC+V3K+2C1/@49.241293,-122.8601199,3a,75y,9.28h,90t/data=!3m6!1e1!3m4!1srwVaylz-Q4z3cj12cTkoag!2e0!7i113312!8i6656!4m5!3m4!1s0x54867871fbaf5dc5:0x2aff3ca16e55c54!8m2!3d49.241479!4d-122.860071>

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# Definitions

- ⦿ **Physical Activity:** Bodily movement from skeletal muscles – requires energy expenditure
  - Eg. Exercise, house cleaning, walking to work,
- ⦿ **Sedentary Behaviour:** Any activity performed awake in seated/reclined position – little to no energy expenditure
  - Eg. Watching screens, riding bus

**Table 5**

The changes in health measures, mean (SD), with self selected pre- and post-training program intensity and volume. Aboriginal participants surveyed in British Columbia from 2007–2010.

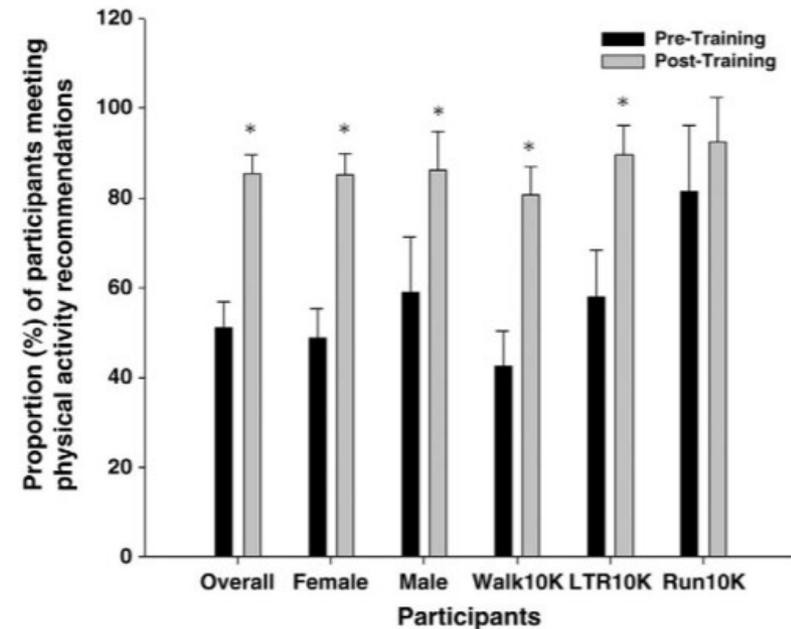
		Walk10K (n = 149)	LTR10K (n = 86)	Run10K (n = 27)
Weight (kg)	Pre	88.4 (21.0)	77.6 (14.1) <sup>†</sup>	75.8 (16.8) <sup>†</sup>
	Post	87.3 (20.9)	78.0 (14.8)	76.0 (16.7)
BMI (kg·m <sup>-2</sup> )	Pre	32.7 (7.1)	28.7 (4.8) <sup>†</sup>	26.2 (4.4) <sup>†</sup>
	Post	32.4 (7.4)	28.9 (5.4)	26.3 (4.8)
Waist circumference (cm)	Pre	104.9 (15.9)	94.8 (13.1) <sup>†</sup>	89.0 (13.1) <sup>†</sup>
	Post	<b>102.7 (16.1)*</b>	<b>92.0 (12.1)*</b>	87.2 (14.4)
Systolic blood pressure (mm Hg)	Pre	124.4 (18.0)	114.1 (14.6)	111.1 (11.8)
	Post	<b>119.9 (13.5)*</b>	115.5 (12.2)	110.9 (12.1)
Diastolic blood pressure (mm Hg)	Pre	75.4 (11.4)	73.8 (11.2)	69.4 (9.9)
	Post	74.0 (11.0)	72.3 (9.9)	70.1 (9.6)
Total cholesterol (mmol/L)	Pre	4.85 (1.07)	4.80 (0.97)	4.67 (0.97)
	Post	<b>4.69 (1.02)*</b>	4.71 (0.91)	4.59 (0.87)
HDL (mmol/L)	Pre	1.30 (0.40)	1.40 (0.39)	1.62 (0.52) <sup>†</sup>
	Post	1.31 (0.42)	1.45 (0.40)	1.63 (0.51)
TC:HDL ratio	Pre	4.13 (1.71)	3.70 (1.37)	3.24 (1.62)
	Post	4.09 (2.12)	3.46 (1.07)	3.11 (1.40)
Physical activity score <sup>‡</sup>	Pre	6.47 (2.91)	7.55 (2.70) <sup>†</sup>	9.56 (1.58) <sup>†</sup>
	Post	<b>8.53 (2.07)*</b>	<b>9.36 (1.82)*</b>	9.96 (1.63)

HDL, High density lipoprotein cholesterol; SD, standard deviation; TC, total cholesterol; TC:HDL, total cholesterol to high density lipoprotein cholesterol ratio.

\* Indicates significant change with training at  $p < 0.05$ .

<sup>†</sup> Indicates significant differences from the Walk10K group before intervention, after adjusting for age and gender.

<sup>‡</sup> Overall score from Healthy Physical Activity Participation Questionnaire (Gledhill and Jamnik, 2003; Shephard and Bouchard, 1994).

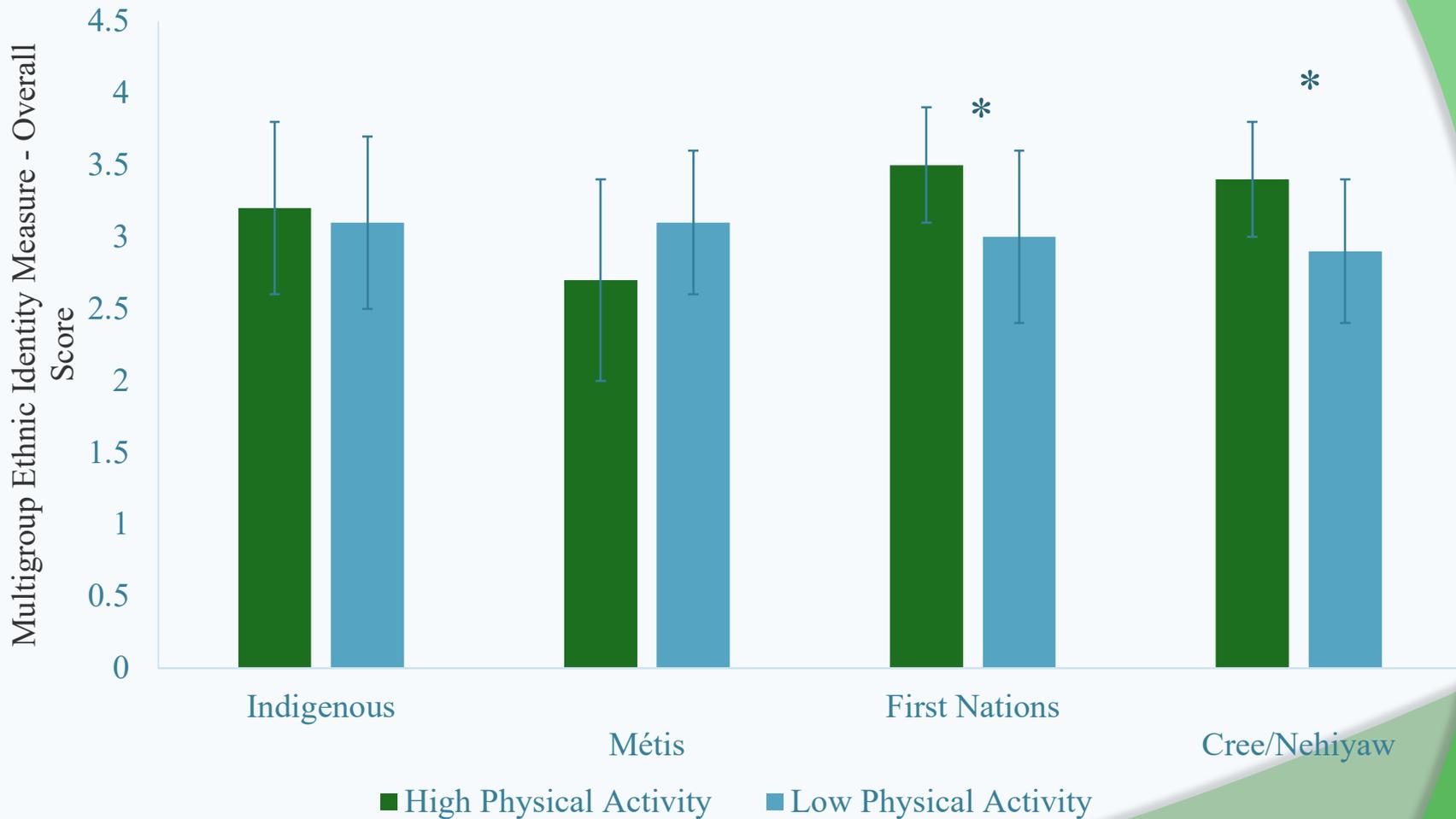


**Fig. 1.** The change in prevalence of 2007–2010 Aboriginal participants in British Columbia meeting physical activity recommendations, achieving 30 min of moderate physical activity 5+ days per week or vigorous physical activity 3+ days per week, with training by gender and self-selected physical activity program, where Walk10K, LTR10K and Run20K represent the walking, walk/run and running programs respectively. Asterisk (\*) indicates significant changes with training,  $p < 0.05$ .

# Métis Traditions

- ◉ Kinship and gatherings important
  - Dancing, Red River Jigging important
  - Social connections
  - Relationship building
  - Story telling
  - Intergenerational

# Culture and Physical Activity



# Factors Associated with Physical Activity and Sedentary Behaviour for Indigenous Peoples



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# Strategies for Physical Activity during Pandemic

- ① Distanced, masked, outdoor physical activity with family/friends
- ① Family Support: physical activity with family
- ① Virtual physical activity with community

Saskatoon

## New U of S study finds mask use has no effect on exercise performance or oxygen levels for healthy people



Sask. mask exemption for indoor exercise unwarranted, says researcher

Jason Warick · CBC News · Posted: Nov 04, 2020 12:16 PM CT | Last Updated: November 4, 2020



University of Saskatchewan researcher Phil Chillibeck and his colleagues have released a study that found mask use has no effect on exercise performance or oxygen levels. Saskatchewan's new mandatory indoor mask rule for Saskatoon, Regina and Prince Albert takes effect Friday but exempts those exercising. (Don Somers/CBC)

HEALTH

## USask study shows mask wearing doesn't affect oxygen intake during a workout



By Brady Ratzlaff · Global News

Posted December 31, 2020 8:03 pm · Updated January 4, 2021 8:11 am



Studies done by a group at USask show how mask wearing doesn't affect oxygen intake during exercise. John Ko/ University of Saskatchewan

<https://www.cbc.ca/news/canada/saskatoon/mask-exemption-for-indoor-exercise-unwarranted-says-researcher-1.5789484>

<https://globalnews.ca/news/7494125/usask-team-study-mask-wearing-oxygen-intake-workout/>



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# Virtual dance



# Thank you

Maarsi



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