**Supplemental Digital Content 1.** Adjustedodds of Sometimes/Often Participation and Activity Limitation, and ≥1 Total Disability Days, among Canadian adults and older adults, by sex and age – Canadian Community Health Survey Cycle 3.1

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|  ***Sometimes/Often Participation and Activity Limitation*** |  |
| **by BMI** (a)Underweight**Healthy Weight**OverweightObese | 1.24 (0.87, 1.78)**1.00** 1.02 (0.91, 1.14)1.14 (0.99, 1.32) | 1.03 (0.54, 1.96)**1.00**1.12 (0.98, 1.27)1.43 (1.22, 1.68) | 1.18 (0.66, 2.13)**1.00**1.12 (0.98, 1.29)1.39 (1.14, 1.68) |  | 1.04 (0.84, 1.27)**1.00**1.16 (1.02, 1.30)1.26 (1.10, 1.44) | 1.17 (0.83, 1.66)**1.00**1.16 (1.02, 1.31)1.64 (1.42, 1.90) | 1.80 (1.31, 2.48)**1.00**1.06 (0.94, 1.20)1.87 (1.60, 2.18) |
| **by PA** (a)InactiveMod. Active**Active** | 1.26 (1.13, 1.42)1.16 (1.02, 1.33)**1.00** | 1.34 (1.16, 1.54)1.12 (0.95, 1.30)**1.00** | 1.91 (1.63, 2.23)1.29 (1.09, 1.53)**1.00** |  | 1.28 (1.13, 1.44)1.07 (0.94, 1.22)**1.00** | 1.45 (1.26, 1.67)1.15 (0.99, 1.34)**1.00** | 2.31 (1.99, 2.68)1.26 (1.06, 1.50)**1.00** |
| **by BMI** (b)UnderweightHealthy **Weight**OverweightObese | 1.22 (0.85, 1.74)**1.00**1.02 (0.92, 1.14)1.12 (0.97, 1.30) | 1.00 (0.53, 1.90)**1.00**1.11 (0.98, 1.26)1.39 (1.19, 1.63) | 1.16 (0.66, 2.05)**1.00**1.11 (0.96, 1.28)1.29 (1.06, 1.57) |  | 1.01 (0.83, 1.25)**1.00**1.14 (1.01, 1.29)1.22 (1.07, 1.40) | 1.19 (0.84, 1.68)**1.00** 1.14 (1.00, 1.29)1.56 (1.35, 1.80) | 1.72 (1.24, 2.39)**1.00**1.02 (0.91, 1.15)1.70 (1.45, 1.99) |
| **by PA** (b)InactiveMod. Active**Active** | 1.25 (1.12, 1.41)1.16 (1.02, 1.33)**1.00** | 1.30 (1.13, 1.49)1.10 (0.94, 1.27)**1.00** | 1.87 (1.60, 2.19)1.28 (1.08, 1.53)**1.00** |  | 1.26 (1.11, 1.42)1.06 (0.93, 1.21)**1.00** | 1.37 (1.19, 1.58)1.12 (0.95, 1.32)**1.00** | 2.21 (1.90, 2.57)1.24 (1.04, 1.49)**1.00** |
| **by BMI-PA**UW-IAUW-MAUW-AHW-IAHW-MA**HW-A**OW-IAOW-MAOW-AOB-IAOB-MAOB-A | 1.50 (0.89, 2.54)1.53 (0.71, 3.30)1.14 (0.59, 2.21)1.22 (1.02, 1.46)1.18 (0.97, 1.43)**1.00**1.30 (1.09, 1.56)1.16 (0.93, 1.45)0.99 (0.81, 1.22)1.40 (1.12, 1.75)1.25 (0.92, 1.68)1.16 (0.89, 1.50) | 2.23 (1.01, 4.91)0.08 (0.01, 0.49)1.18 (0.36, 3.93)1.46 (1.13, 1.88)1.11 (0.82, 1.50)**1.00**1.49 (1.16, 1.91)1.31 (0.99, 1.74)1.22 (0.93, 1.61)1.86 (1.41, 2.46)1.71 (1.22, 2.40)1.52 (1.04, 2.23) | 3.10 (1.40, 6.85)1.96 (0.50, 7.73)0.41 (0.11, 1.59)2.00 (1.55, 2.58)1.26 (0.95, 1.68)**1.00** 2.08 (1.66, 2.61)1.46 (1.13, 1.89)1.19 (0.91, 1.55)2.37 (1.79, 3.14)1.89 (1.29, 2.77)1.31 (0.87, 1.97) |  | 1.27 (0.94, 1.71)1.06 (0.69, 1.63)0.77 (0.51, 1.14)1.15 (0.99, 1.35)0.95 (0.81, 1.13)**1.00**1.40 (1.15, 1.69)1.15 (0.92, 1.44)0.94 (0.74, 1.20)1.39 (1.14, 1.70)1.38 (1.06, 1.78)1.04 (0.77, 1.41) | 1.69 (1.11, 2.58)1.84 (0.65, 5.24)0.96 (0.52, 1.77)1.55 (1.27, 1.89)1.07 (0.85, 1.36)**1.00**1.48 (1.21, 1.82)1.55 (1.24, 1.94)1.26 (0.96, 1.65)2.26 (1.80, 2.83)1.67 (1.27, 2.23)1.84 (1.27, 2.65) | 3.89 (2.46, 6.15)2.07 (1.14, 3.75)1.23 (0.60, 2.55)2.10 (1.72, 2.56)1.21 (0.96, 1.51)**1.00** 2.12 (1.73, 2.59)1.32 (1.03, 1.68)0.98 (0.73, 1.32)3.96 (3.15, 4.99)1.58 (1.11, 2.26)1.47 (0.88, 2.47) |

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|  ***≥1 Total Disability Days (Physical + Mental)*** |  |
| **by BMI** (a)Underweight**Healthy Weight**OverweightObese | 0.80 (0.47, 1.37)**1.00**1.00 (0.88, 1.12)0.96 (0.82, 1.12) | 2.29 (1.09, 4.83)**1.00**1.06 (0.90, 1.24)1.04 (0.84, 1.28) | 2.14 (1.14, 4.02)**1.00**1.27 (1.03, 1.56)1.13 (0.86, 1.47) |  | 0.90 (0.74, 1.10)**1.00**1.11 (0.99, 1.25)1.16 (1.01, 1.33) | 1.30 (0.81, 2.06)**1.00**0.96 (0.83, 1.10)1.00 (0.85, 1.18) | 1.45 (1.02, 2.06)**1.00**1.14 (0.96, 1.35)1.16 (0.96, 1.42) |
| **by PA** (a)InactiveMod. Active**Active** | 0.88 (0.78, 0.99)0.92 (0.80, 1.05)**1.00** | 1.17 (0.98, 1.41)0.94 (0.76, 1.16)**1.00** | 1.72 (1.33, 2.21)1.13 (0.83, 1.53)**1.00** |  | 1.01 (0.90, 1.14)1.06 (0.94, 1.21)**1.00** | 1.23 (1.04, 1.46)1.11 (0.91, 1.36)**1.00** | 1.71 (1.37, 2.15)1.33 (1.03, 1.72)**1.00** |
| **by BMI** (b)Underweight**Healthy Weight**OverweightObese | 0.81 (0.48, 1.38)**1.00**0.99 (0.88, 1.12)0.97 (0.83, 1.13) | 2.26 (1.07, 4.76)**1.00**1.05 (0.89, 1.24)1.02 (0.83, 1.26) | 2.04 (1.08, 3.84)**1.00**1.26 (1.02, 1.55)1.05 (0.80, 1.37) |  | 0.90 (0.74, 1.10)**1.00**1.11 (0.99, 1.25)1.16 (1.01, 1.33) | 1.31 (0.82, 2.09)**1.00**0.94 (0.82, 1.09)0.97 (0.82, 1.15) | 1.41 (0.99, 2.00)**1.00**1.12 (0.94, 1.33)1.10 (0.90, 1.34) |
| **by PA** (b)InactiveMod. Active**Active** | 0.88 (0.78, 0.99)0.92 (0.80, 1.05)**1.00** | 1.17 (0.97, 1.40)0.93 (0.75, 1.16)**1.00** | 1.72 (1.33, 2.21)1.13 (0.83, 1.53)**1.00** |  | 1.00 (0.89, 1.12)1.06 (0.93, 1.20)**1.00** | 1.24 (1.05, 1.48)1.11 (0.92, 1.36)**1.00** | 1.69 (1.35, 2.12)1.32 (1.03, 1.71)**1.00** |
| **by BMI-PA**UW-IAUW-MAUW-AHW-IAHW-MA**HW-A**OW-IAOW-MAOW-AOB-IAOB-MAOB-A | 0.99 (0.47, 2.10)0.17 (0.05, 0.58)0.76 (0.36, 1.61)0.86 (0.71, 1.03)0.94 (0.77, 1.14)**1.00**0.89 (0.74, 1.08)0.86 (0.68, 1.07)1.00 (0.82, 1.22)0.81 (0.66, 1.00)1.01 (0.73, 1.38)0.92 (0.68, 1.24) | 2.17 (0.96, 4.91)1.89 (0.13, 27.83)3.93 (0.94, 16.45)1.12 (0.83, 1.51)0.76 (0.96, 4.91)**1.00**1.18 (0.89, 1.55)0.92 (0.67. 1.26)0.93 (0.66, 1.31)1.04 (0.77, 1.42)1.05 (0.77, 1.42)0.94 (0.57, 1.54) | 3.98 (1.75, 9.01)2.31 (0.32, 16.69)0.34 (0.08, 1.55)1.66 (1.13, 2.45)0.85 (0.54, 1.33)**1.00**1.85 (1.23, 2.77)1.40 (0.86, 2.26)1.30 (0.82, 2.04)1.76 (1.15, 2.70)1.34 (0.67, 2.70)0.31 (0.12, 0.81) |  | 0.86 (0.65, 1.14)1.06 (0.72, 1.57)0.95 (0.62, 1.46)1.01 (0.87, 1.18)1.08 (0.91, 1.28)**1.00**1.17 (0.98, 1.39)1.15 (0.93, 1.43)1.08 (0.87, 1.35)1.13 (0.93, 1.38)1.21 (0.93, 1.57)1.36 (1.02, 1.81) | 1.23 (0.69, 2.21)2.84 (0.88, 9.21)1.08 (0.57, 2.05)1.35 (1.06, 1.73)1.07 (0.81, 1.44)**1.00**1.13 (0.89, 1.44)1.22 (0.93, 1.61)1.00 (0.69, 2.21)1.27 (0.99, 1.64)0.98 (0.70, 1.35)1.14 (0.78, 1.64) | 2.17 (1.29, 3.62)2.45 (1.22, 4.92)0.73 (0.24, 2.23)1.60 (1.16, 2.21)1.19 (0.83, 1.70)**1.00**1.76 (1.27, 2.44)1.58 (1.07, 2.34)0.83 (0.50, 1.37)1.78 (1.24, 2.54)1.04 (0.62, 1.73)1.73 (0.99, 3.04) |

Healthy Weight and Active are referent groups. All models adjusted for race/ethnicity, education, household income, smoking, marital status, residence, comorbidities. a) BMI or PA each in model without the other; (b) BMI and PA in model together

BMI Body Mass Index; PA Physical Activity; UW Underweight; HW Healthy Weight; OW Overweight; OB Obese; IA Inactive; MA Moderately Active; A Active.