**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**  Overweight  Obese | 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)  Inactive  Mod. 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)  Underweight  Healthy **Weight**  Overweight  Obese | 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)  Inactive  Mod. 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-IA  UW-MA  UW-A  HW-IA  HW-MA  **HW-A**  OW-IA  OW-MA  OW-A  OB-IA  OB-MA  OB-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**  Overweight  Obese | 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)  Inactive  Mod. 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**  Overweight  Obese | 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)  Inactive  Mod. 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-IA  UW-MA  UW-A  HW-IA  HW-MA  **HW-A**  OW-IA  OW-MA  OW-A  OB-IA  OB-MA  OB-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.