

CORE QUESTIONNAIRES – Health

The following questions appear across sites and make up the core INTERACT Health Questionnaire. They focus on INTERACT's key health outcomes: physical activity, social participation, and well-being. The core questionnaire also includes questions on socio-demographic data, general health, use of activity monitors, housing type, and neighbourhood.

The question sequence changes across sites, due to the addition of site-specific questions to this core list of questions.

PHYSICAL ACTIVITY

QUESTION	SOURCE
Q#_work_vigpa 1. During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, digging, heavy construction, or climbing up stairs as part of your work? Think about only those physical activities that you did for at least 10 minutes at a time.	IPAQ 2002 Long > Q2 ¹
Range 1-7 Days per week 0 No vigorous job-related physical activity	
Q#_work_vigpa_freq 2. How much time did you usually spend on one of those days doing vigorous physical activities as part of your work?	IPAQ 2002 Long > Q3 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	
Q#_work_modpa 3. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do moderate physical activities like carrying light loads as part of your work? Please do not include walking. *	IPAQ 2002 Long > Q4 ¹
Range 1-7 Days per week 0 No moderate job-related physical activity	

Q#_work_modpa_freq	IPAQ 2002
4. How much time did you usually spend on one of those days doing moderate physical activities as part of your work? *	Long > Q5 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	
Q#_travel_motor	IPAQ 2002
5. During the last 7 days, on how many days did you travel in a motor vehicle like a train, bus, car, or metro?	Long > Q8 ¹
Range 1-7 Days per week 0 No travelling in a motor vehicle from place to place	
Q#_travel_motor_freq	IPAQ 2002
6. How much time did you usually spend on one of those days travelling in a train, bus, car, metro, or other kind of motor vehicle?	Long > Q9 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	
Q#_travel_bike	IPAQ 2002
7. During the last 7 days, on how many days did you <u>bicycle</u> for at least 10 minutes at a time to go from place to place?	Long > Q10 ¹
Range 1-7 Days per week 0 No bicycling from place to place	
Q#_travel_bike_freq	IPAQ 2002
8. How much time did you usually spend on one of those days to bicycle from place to place?	Long > Q11 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	
Q#_travel_walk	IPAQ 2002
9. During the last 7 days, on how many days did you <u>walk</u> for at least 10 minutes at a time to go from place to place?	Long > Q12 ¹
Range 1-7 Days per week 0 No walking from place to place	
Q#_travel_walk_freq	IPAQ 2002
10. How much time did you usually spend on one of those days walking from place to place?	Long > Q13 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	

Q#_leisure_walk	IPAQ 2002
11. Not counting any walking for transportation that you have already mentioned, during the last 7 days, on how many days did you walk for at least 10 minutes at a time in your leisure time?	Long > Q20 ¹
Range 1-7 Days per week 0 No walking in leisure time	
Q#_leisure_walk_freq	IPAQ 2002
12. How much time did you usually spend on one of those days walking in your leisure time?	Long > Q21 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	
Q#_leisure_vigpa	IPAQ 2002
13. Think about only those physical activities that you did for at least 10 minutes at a time, not counting any activity for transportation or work that you have already mentioned. During the last 7 days, on how many days did you do <u>vigorous physical activities</u> like aerobics, running, fast bicycling, or fast swimming in your leisure time?	Long > Q22 ¹
Range 1-7 Days per week 0 No vigorous activity in leisure times	
Q#_leisure_vigpa_freq	IPAQ 2002
14. How much time did you usually spend on one of those days doing vigorous physical activities in your leisure time?	Long > Q23 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	
Q#_modpa_leisure	IPAQ 2002
15. During the last 7 days, on how many days did you do moderate physical activities like bicycling at a regular pace, swimming at a regular pace, or doubles tennis in your leisure time?	Long > Q24 ¹
Range 1-7 Days per week 0 No moderate activity in leisure time	
Q#_modpa_leisure_freq	IPAQ 2002
16. How much time did you usually spend on one of those days doing moderate physical activities in your leisure time?	Long > Q25 ¹
Range 0-16 Hours per day Range 0-120 Minutes per day	

Q#_sit_weekday	IPAQ 2002
17. During the last 7 days, how much time did you usually spend sitting on a <u>weekday</u> ?	Long > Q26 ¹
Range 0-16 Hours per day	
Range 0-120 Minutes per day	
Q#_sit_weekend	IPAQ 2002
18. During the last 7 days, how much time did you usually spend sitting on a <u>weekend day</u> ?	Long > Q27 ¹
Range 0-16 Hours per day	
Range 0-120 Minutes per day	

GENERAL HEALTH

QUESTION	SOURCE
Q#_height	Canadian
19. How tall are you? (Choose either feet or centimetres)	Community
Range 1-8', 1-12" ___', ___"	Health Survey
Range 1-260 ___ cm	(CCHS) - 2016 >
	HWT_Q005
	(altered) ²
Q#_weight	Canadian
20. How much do you weigh? (Choose either pounds or kilograms)	Community
Range 1-400 ___ lbs.	Health Survey
Range 1-180 ___ kg	(CCHS) - 2016 >
	HWT_Q040
	(altered) ²
Q#_sf1	Canadian
21. In general, would you say your health is:	Community
1 Excellent	Health Survey
2 Very good	(CCHS) - 2016 >
3 Good	GEN_Q005 /
4 Fair	12-Item Short
5 Poor	Form Health
	Survey (SF-12) >
	Q1 ³

Q#_sf2, Q#_sf3	<p>22. The following questions are about activities you might do during a typical day. Does <u>your health now limit you</u> in these activities? If so, how much?</p> <p>a. Moderate activities such as moving a table, pushing a vacuum cleaner, bowling, or playing golf</p> <p>b. Climbing several flights of stairs</p>	12-Item Short Form Health Survey (SF-12) > Q2, Q3 ³
<p>1</p> <p>2</p> <p>3</p>	<p>Yes, limited a lot</p> <p>Yes, limited a little</p> <p>No, not limited at all</p>	
Q#_sf4, Q#_sf5	<p>23. During the <u>past 4 weeks</u>, have you had any of the following problems with your work or other regular daily activities <u>as a result of your physical health</u>?</p> <p>a. Accomplished less than you would like</p> <p>b. Were limited in the <u>kind of work</u> or other activities</p>	12-Item Short Form Health Survey (SF-12) > Q4, Q5 ³
<p>1</p> <p>2</p>	<p>Yes</p> <p>No</p>	
Q#_sf6, Q#_sf7	<p>24. During the <u>past 4 weeks</u>, have you had any of the following problems with your work or other regular daily activities <u>as a result of any emotional problems</u> (such as feeling depressed or anxious)?</p> <p>a. Accomplished less than you would like</p> <p>b. Did work or activities less carefully than usual</p>	12-Item Short Form Health Survey (SF-12) > Q6, Q7 ³
<p>1</p> <p>2</p>	<p>Yes</p> <p>No</p>	
Q#_sf8	<p>25. During the <u>past 4 weeks</u>, how much <u>did pain interfere</u> with your normal work (including work outside the home and housework)?</p>	12-Item Short Form Health Survey (SF-12) > Q8 ³
<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p>	<p>Not at all</p> <p>Slightly</p> <p>Moderately</p> <p>Quite a bit</p> <p>Extremely</p>	

Q#_sf9, Q#_sf10, Q#_sf11	<p>26. How much of the time during the <u>past 4 weeks</u>...</p> <ul style="list-style-type: none"> a. Have you felt calm and peaceful? b. Did you have a lot of energy? c. Have you felt downhearted and blue? 	<p>12-Item Short Form Health Survey (SF-12) > Q9, Q10, Q11 ³</p>
<p>1 2 3 4 5 6</p>	<p>All of the time Most of the time A good bit of the time Some of the time A little of the time None of the time</p>	
Q#_sf12	<p>27. During the <u>past 4 weeks</u>, how much of the time has your <u>physical health or emotional problems</u> interfered with your social activities (like visiting friends, relatives, etc.)?</p>	<p>12-Item Short Form Health Survey (SF-12) > Q12 ³</p>
<p>1 2 3 4 5 6</p>	<p>All of the time Most of the time A good bit of the time Some of the time A little of the time None of the time</p>	

WELL-BEING

QUESTION	SOURCE
<p>Q#_pwb_a, Q#_pwb_b, Q#_pwb_c... all the way to Q#_pwb_i</p> <p>28. Thinking about your own life and personal circumstances, how satisfied are you...</p> <ul style="list-style-type: none"> a. With your life as a whole? b. With your standard of living? c. With your health? d. With what you are achieving in life? e. With your personal relationships? f. With how safe you feel? g. With feeling part of your community? h. With your future security? i. With your spirituality or religion? 	<p>PWI-A 2013 - Life Domain scales ⁴</p>

(continued on next page)

INTERACT

- 0 0. Completely dissatisfied
 1 1.
 2 2
 3 3
 4 4
 5 5.
 6 6
 7 7
 8 8
 9 9
 10 10. Completely satisfied

Q#_gwb_a	29. In general, I consider myself:	Subjective Happiness Scale > Q1 ⁵
1	Not a very happy person	
2	2	
3	3	
4	4	
5	5	
6	6	
7	A very happy person	

Q#_gwb_b	30. Compared with most of my peers, I consider myself:	Subjective Happiness Scale > Q2 ⁵
1	Less happy	
2	2	
3	3	
4	4	
5	5	
6	6	
7	More happy	

Q#_gwb_c	31. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?	Subjective Happiness Scale > Q3 ⁵
1	Not at all	
2	2	
3	3	
4	4	
5	5	
6	6	
7	A great deal	

Q#_gwb_d	32. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?	Subjective Happiness Scale > Q4 ⁵
1	Not at all	
2	2	
3	3	
4	4	
5	5	
6	6	
7	A great deal	
Q#_loneliness_a, Q#_loneliness_b, Q#_loneliness_c	33. The next questions are about how you feel about different aspects of your life. For each one, tell us how often you feel that way.*	Three-Item Loneliness Scale ⁶
	a. How often do you feel that you lack companionship?	
	b. How often do you feel left out?	
	c. How often do you feel isolated from others?	
1	Hardly ever	
2	Some of the time	
3	Often	

SOCIAL PARTICIPATION

QUESTION	SOURCE
Q#_belonging	Canada Community Health Survey (CCHH) - Sense of Belonging ²
34. How would you describe your sense of belonging to your local community? Would you say it is:	
1	
Very strong	
2	
Somewhat strong	
3	
Somewhat weak	
4	
Very weak	
77	
I don't know	

Q#_spat_a, Q#_spat_b, Q#_spat_c... all the way to Q#_spat_e	Neighbourhood Social Environment Measure ⁷
35. How often do you...	
<ul style="list-style-type: none"> a. Say hello to a neighbour? b. Stop and have a chat with a neighbour? c. Visit a neighbour, or receive a visit from a neighbour? d. Go somewhere (e.g., to a shop; to a restaurant), together with a neighbour? e. Ask help/advice from or do you help/give advice to a neighbour yourself? 	
Range 0-7 Days per week	
Range 0-31 Days per month	
Range 0-365 Days per year	
Tick box Never	
Q#_spat2_a, Q#_spat2_b, Q#_spat2_c... all the way to Q#_spat2_e	Collective Efficacy Measure ⁸
36. Thinking about your neighbourhood, how would you rate the following statements?	
<ul style="list-style-type: none"> a. This is a close-knit neighbourhood b. People generally do not get along c. People are willing to help neighbours d. People do not share same values e. People can be trusted 	
1 Strongly disagree	
2	
3 Neutral	
4	
5 Strongly agree	
Q#_spat3_a, Q#_spat3_b	General Social Survey > TRT_Q540 and TRT_Q570 ⁹
37. If you lost a wallet or purse that contained two hundred dollars, how likely is it to be returned with the money in it, if it was found:	
<ul style="list-style-type: none"> a. By someone who lives close by? Would it be: b. By a complete stranger? Would it be: 	
1 Very likely	
2 Somewhat likely	
3 Not at all likely	
77 I don't know	

NEIGHBOURHOOD

QUESTION	SOURCE
Q#_neighb_a, Q#_neighb_b, Q#_neighb_c, Q#_neighb_d	n/a
<p>38. Here are some questions about your satisfaction with the neighbourhood in which you live. Please indicate your satisfaction with each item.</p> <ul style="list-style-type: none"> a. How satisfied are you with your neighbourhood as a good place to live? Are you... b. How satisfied are you with the number of people you know in your neighbourhood? Are you... c. How satisfied are you with the ethnic diversity of your neighbourhood? Are you... d. How satisfied are you with your neighbourhood as a good place to raise children? Are you... <ul style="list-style-type: none"> 1 Strongly satisfied 2 Satisfied 3 Neither satisfied nor dissatisfied 4 Dissatisfied 5 Strongly dissatisfied 	

NEIGHBOURHOOD SELECTION

QUESTION	SOURCE
Q#_neigh_pref_a, Q#_neigh_pref_b	n/a
<p>39. Before moving into your current dwelling, when you were looking for a neighbourhood to live in, to what extent were the following characteristics important? Please report your perspectives, even if the neighbourhood where you currently live does not have these characteristics.</p> <ul style="list-style-type: none"> a. Good access to public transportation b. Sufficient parks and green spaces c. Sufficient shops and services d. Proximity to doctors, a pharmacy or other health services e. A good knowledge of the neighbourhood f. Presence of relatives, friends or acquaintances g. A neighbourhood where it is pleasant to walk h. A neighbourhood where it is practical to move around by car (ease of parking, low traffic, good access by car) i. Presence of good schools* <p style="text-align: right;"><i>(continued on next page)</i></p>	

- 1 Very important
- 2 Somewhat important
- 3 Not very important
- 4 Not important at all
- 77 I don't know

ACTIVITY TRACKING *

QUESTION	SOURCE
<p>Q#_tracking1</p> <p>40. Do you currently own or use any of the following devices or smartphone apps to monitor your physical activity?*</p> <ol style="list-style-type: none"> 1 I do not have one but might be interested in trying one 2 I do not have one and I am not interested in trying one 3 Wearable devices (Fitbits, Garmins, and Jawbone, etc.) 4 Smart watches (Apple Watch, Galaxy Gear, Samsung Gear, etc.) 5 Smartphone app (Apple Health, Samsung Health, Google Fit, Strava, etc.) 6 Other Please specify: _____ 	<p>Use of activity tracker (altered) 10</p>
<p>Q#_tracking2</p> <p>41. Thinking about a typical month, how many days on average do you use your device or smartphone app to monitor your physical activity? If you own several activity trackers, choose the one that you use most often.*</p> <p>Range 0-31 Days per month</p>	<p>Use of activity tracker (altered) 10</p>
<p>Q#_tracking3A</p> <p>42. When using a device or app to monitor your physical activity, how concerned are you about the possibility of your location being known by the company which developed the device or app?*</p> <ol style="list-style-type: none"> 1 Not at all 2 Slightly 3 Moderately 4 Very much 5 Extremely 6 I have no opinion on the subject 	<p>Privacy concern measures (altered)¹¹</p>

Q#_tracking3B	43. If you had to use a device or app, how concerned would you be about the possibility of your location being known by the company which developed the device or app?*	Privacy concern measures (altered) ¹¹
1 2 3 4 5 6	Not at all Slightly Moderately Very much Extremely I have no opinion on the subject	
Q#_tracking4	44. How concerned are you about the possibility of your location being known <u>by your network mobile provider</u> when using a smartphone?*	Privacy concern measures (altered) ¹¹
1 2 3 4 5 6 7	Not at all Slightly Moderately Very much Extremely I have no opinion on the subject I do not use a smartphone connected to a mobile network operator	
Q#_tracking5	45. Compared with friends of my age, my concern regarding protecting my privacy is...*	Privacy concern measures (altered) ¹¹
1 2 3 4 5	Much lower Lower About the same Higher Much higher	

HOUSING

QUESTION	SOURCE
<p>Q#_house_tenure</p> <p>46. Thinking about where you live now, are you ...</p> <p>1 An owner?</p> <p>2 A tenant?</p> <p>3 A resident in a relative or friend's home?</p> <p>4 A resident other than in a relative or friend's home?</p> <p>5 Other (Please specify)</p> <p>77 I don't know/Prefer not to answer</p>	CURHA ¹²
<p>Q#_dwelling_type</p> <p>47. In what type of dwelling do you currently live? Is it...</p> <p>1 A single-detached house?</p> <p>2 A semi-detached house?</p> <p>3 A row house?</p> <p>4 An apartment (or condo) in a duplex or triplex (two or three dwellings located one above the other)?</p> <p>5 An apartment (or condo) in a building that has fewer than five storeys?</p> <p>6 An apartment (or condo) in a building that has five or more storeys?</p> <p>7 A mobile home or other movable dwelling?</p> <p>8 A seniors' home?</p> <p>9 Other (Please specify)</p> <p>77 I don't know/Prefer not to answer</p>	CURHA ¹²
<p>Q#_residence</p> <p>48. When did you move to your current residence?</p>	CURHA ¹²

DOG OWNERSHIP

QUESTION	SOURCE
<p>Q#_dog</p> <p>49. Do you live with a dog?</p> <p>1 Yes</p> <p>2 No</p>	n/a

Q#_dog_walk	n/a
50. Do you walk the dog regularly?	
1 Yes	
2 No	
Q#_dog_walk_freq	n/a
51. How many hours or minutes a day on average do you walk the dog?	
Range 0-24 Hours per day	
Range 0-120 Minutes per day	

DEMOGRAPHICS

QUESTION	SOURCE
Q#_gender	Sex and Gender measures ¹³
52. What is your current gender identity?*	
1 Man	
2 Woman	
3 Trans man	
4 Trans woman	
5 Genderqueer/Gender non-conforming	
6 Different identity (Please specify)	
Q#_sex	Sex and Gender measures ¹³
53. What sex were you assigned at birth?*	
1 Male	
2 Female	
3 Other (Please specify)	
Q#_marital_status	CURHA ¹²
54. What is your marital status? Are you...	
1 Single (never married)	
2 Married (or common law)	
3 Separated or divorced	
4 Widowed	

Q#_children	CURHA ¹²
55. Do you have children?	
1 Yes	
2 No	
Q#_living_children	CURHA ¹²
56. How many children do you have?	
Range 1-30 Children	
Q#_living_arrange	CURHA ¹²
57. What is your current living arrangement? Do you live... Select all that apply.	
1 Alone	
2 With a spouse (or partner)?	
3 With children?	
4 With grandchildren?	
5 With relatives or siblings?	
6 With friends?	
7 With other people? (Please specify)	
Q#_children_household	n/a
58. How many children under the age of 16 live in your household?	
Range 0-30 Children under the age of 16 live in my household	
Q#_children_age1, Q#_children_age2, etc.	n/a
59. Please list the age (in years) of each child under 16:	
Child 1 Range 0-15	
Child 2 Range 0-15	
Child 3 Range 0-15	
Q#_adults_household	n/a
60. How many adults aged 16 or older live in your household including yourself?	
Range 1-20 Adults live in my household	
Q#_born_can	n/a
61. Were you born in Canada?	
1 Yes	
2 No	

Q#_move_can	n/a
62. When did you move to Canada?	
Q#_group_id	n/a
63. To which ethnic or cultural groups did your ancestors belong? (Check all that apply) + %	
1 Aboriginal	
2 Asian	
3 Black	
4 Caucasian	
5 Latin American	
6 Middle Eastern	
7 Other *	
77 I don't know/Prefer not to answer	
Q#_income	n/a
64. Which category best describes your annual household income, taking into account all sources of income?	
1 No income	
2 \$1 to \$9,999	
3 \$10,000 to \$14,999	
4 \$15,000 to \$19,999	
5 \$20,000 to \$29,999	
6 \$30,000 to \$39,999	
7 \$40,000 to \$49,999	
8 \$50,000 to \$99,999	
9 \$100,000 to \$149,999	
10 \$150,000 to \$199,999	
11 \$200,000 or more	
77 I don't know/Prefer not to answer	
Q#_income_needs	n/a
65. To what extent does this annual household income allow you to satisfy your household's needs?	
1 Very well	
2 Well	
3 Not so well	
4 Not at all	
77 I don't know/Prefer not to answer	

Q#_education	n/a
66. What is your highest education level?	
1 Primary/Elementary school	
2 Secondary school	
3 Trade/Technical school or college diploma	
4 University degree	
5 Graduate degree	
77 I don't know/Prefer not to answer	
Q#_employment	n/a
67. What is your current employment status? *	
1 Retired and not working	
2 Employed full-time	
3 Employed part-time	
4 Unemployed and looking for work	
5 Unemployed and not looking for work	
6 Other (Please specify)	

* indicates the question/question did not appear in the Victoria questionnaire

+ indicates the question was altered in the Montreal questionnaire

% indicates the question was altered in the Saskatoon questionnaire

REFERENCES

1. INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (October 2002). doi:10.1186/s12889-016-3778-2.
2. Canadian Community Health Survey (CCHS) - 2017. Statistics Canada. http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&a=1&&lang=en&Item_Id=507367. Published 2017. Accessed July 23, 2018.
3. 12-Item Short Form Survey Instrument | RAND. RAND Health. https://www.rand.org/health-care/surveys_tools/mos/12-item-short-form.html. Accessed July 23, 2018.
4. The International Well Being Group. *Personal Wellbeing Index – Adult (English) 5th Edition The International Wellbeing Group*. 5th Editio.; 2013. doi:10.1162/001152604323049361.
5. Lyubomirsky S, Lepper HS. A Measure of Subjective Happiness: Preliminary Reliability and Construct Validation. *Soc Indic Res*. 1999;46(2):137-155. doi:10.1023/A:1006824100041.
6. Hughes ME, Waite LJ, Hawkey LC, Cacioppo JT. A Short Scale for Measuring Loneliness in Large Surveys: Results From Two Population-Based Studies. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2394670/pdf/nihms47842.pdf>. Accessed April 10, 2018.

7. Van Holle V, Van Cauwenberg J, De Bourdeaudhuij I, Deforche B, Van de Weghe N, Van Dyck D. Interactions between Neighborhood Social Environment and Walkability to Explain Belgian Older Adults' Physical Activity and Sedentary Time. *Int J Environ Res Public Health*. 2016;13(6). doi:10.3390/ijerph13060569.
8. Cohen DA, Inagami S, Finch B. The built environment and collective efficacy. *Health Place*. 2008;14(2):198-208. doi:10.1016/j.healthplace.2007.06.001.
9. General Social Survey 2009 - Cycle 23 - Victimization - Main Survey - Questionnaire Package.
http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&Item_Id=54684.
Published 2009. Accessed July 23, 2018.
10. Macridis S, Johnston N, Johnson S, Vallance JK. Consumer physical activity tracking device ownership and use among a population-based sample of adults. *PLoS One*. 2018;13(1):1-11. doi:10.1371/journal.pone.0189298.
11. López G, Marín G, Calderón M. Human aspects of ubiquitous computing: a study addressing willingness to use it and privacy issues. *J Ambient Intell Humaniz Comput*. 2017;8(4):497-511. doi:10.1007/s12652-016-0438-4.
12. Kestens Y, Chaix B, Gerber P, et al. Understanding the role of contrasting urban contexts in healthy aging: an international cohort study using wearable sensor devices (the CURHA study protocol). *BMC Geriatr*. 2016;16:96. doi:10.1186/s12877-016-0273-7.
13. Bauer GR, Braimoh J, Scheim AI, Dharma C. Transgender-inclusive measures of sex/gender for population surveys: Mixed-methods evaluation and recommendations. Dalby AR, ed. *PLoS One*. 2017;12(5):e0178043. doi:10.1371/journal.pone.0178043.