



The Prospective Physical Activity, Sitting and Sleep consortium:

**Questionnaires and Physical Measurements for New Cohorts
that Enter ProPASS Prospectively**

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Aim

The purpose of this document is to provide a list of questionnaires and other methods as options to be included in data collection of new cohorts that enter ProPASS *prospectively*, i.e. before they collect the accelerometry data. The questionnaires and methods proposed in this document have been used in various large epidemiological studies including existing ProPASS cohorts in ProPASS (e.g. the 1970 British Birth Cohort, the Australian Longitudinal Study on Women's Health and the Trøndelag Health Study (HUNT) in Norway).

Advantages of prospective harmonization

Retrospective harmonisation is labour insensitive and often limits analytic options. Adopting similar questionnaires and methods such as the ones proposed in this document facilitates prospective harmonization of cohort data, which could provide a wider range of pre-harmonised covariates and other contextual variables across ProPASS cohorts to enhance statistical power, and comprehensive adjustment for confounding in future analysis.

Uses of this document

The questionnaires and methods in this document cover a variety of information, including demographics, anthropometrics, biomedical risk factors, diet, mental health status, cognitive function, and self-reported physical activity, sedentary behaviours, and sleep. New cohorts are encouraged to use as few or as many sets of the proposed questionnaires and methods in this document. Modification is acceptable due to cultural norms, financial limitations or other important considerations.

SECTION I--QUESTIONNAIRE

1. Demographics

Sex¹

What was your biological sex at birth?

- Male
- Female

Gender

What gender do you identify as?

- Male
- Female
- Transgender male
- Transgender female
- Gender variant/non-conforming
- Prefer not to say
- Other _____

Age

What is your age*? _____ years

*Age at last birthday

Note: asking about age instead of date of birth is more practical for privacy reasons.

Education level

[Question adopted from *International Standard Classification of Education (ISCED)*]

What is the highest education level that you have completed?

- ISCED 0 = Early childhood education. Education for young children (0-3 years). Examples are early childhood education and development, play school, reception, pre-primary, pre-school, or *educación inicial*.
- ISCED 1 = Primary Education. Education for children between 5-12 years. Examples are primary education, elementary education or basic education.
- ISCED 2 = Lower Secondary Education. Students are typically between 10-13 years at the start. Examples are secondary school (stage one/lower grades if there is one program that spans ISCED levels 2 and 3), junior secondary school, middle school, or junior high school.

- ISCED 3 = Upper Secondary Education. Pupils enter this level typically between ages 14 and 16. Examples are secondary school (stage two/upper grades), senior secondary school, or (senior) high school.
- ISCED 4 = Post-secondary non-Tertiary Education. Education programs which are designed for direct labor market entry. Examples are technician diploma, primary professional education, or *préparation aux carrières administratives*
- ISCED 5 = Short-cycle tertiary education. Education programs are practically-based, occupationally-specific and prepare students to enter the labor market, or provide a pathway to other tertiary education programs. Examples are (higher) technical education, community college education, technician or advanced/higher vocational training, associate degree, or *bac+2*.
- ISCED 6 = Bachelor's degree or equivalent tertiary education level. Examples are Bachelor's programs, *licence*, or first university cycle.
- ISCED 7 = Master's degree or equivalent tertiary education level. Examples are master programs or *magister*.
- ISCED 8 = Doctoral degree or equivalent tertiary education level. Examples are PhD, DPhil, D.Lit, D.Sc, LL.D, Doctorate or similar terms.

Ethnicity

[Question adapted from gov.uk website: "Ethnicity facts and figures"²]

Which category best describes your ethnicity?

- Caucasian or White (Eg: German, Irish, English, Italian, Polish, French, etc)
- Hispanic, Latino or Spanish origin (Eg: Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian, etc)
- Black or African American (Eg: African American, Jamaican, Haitian, Nigerian, Ethiopian, Somalian, etc)
- Asian (Eg: Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese, etc)
- Native American, American Indian or Alaska Native (Eg: Navajo nation, Blackfeet tribe, Mayan, Aztec, Native Village or Barrow Inupiat Traditional Government, Nome Eskimo Community, etc)
- Middle Eastern or North African (Eg: Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian, etc)
- Native Hawaiian or Other Pacific Islander (Eg: Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, etc)
- Other race, ethnicity or origin: _____

Marital status

[Custom question(s) compiled from multiple sources]

What is your marital status?

- Single
- Married
- Widow/widower
- Divorced
- Separated
- Unmarried cohabitation

Employment status

[Custom questions compiled from multiple sources]

Which of the following best describes your current employment status?

- Employed
- Unemployed and actively seeking work
- Unemployed and not actively seeking work
- Student (undertaking full or part-time education or training as a student and not working or actively seeking work)
- Unemployed due to long-term sick or disabled
- Looking after the family or home as a homemaker and not working or actively seeking work
- Unpaid voluntary work
- Retired

Do you work full time (at least 32 hours per week) in your main occupation?

- Yes
- No

Which time of the day do you usually work in your main occupation?³

- Fixed day work
- Fixed evening work (mostly between 15.00–24.00 hours)
- Fixed night work (mostly between 24.00–05.00 hours)
- Varying working hours with night shifts
- Varying working hours without night shifts
- Other

Occupational group

[Question(s) adapted from International Standard Classification of Occupations, ISCO-88]

Which of the following best describes your main occupation status?

- Manager. Managers plan, direct, coordinate and evaluate the overall activities of enterprises, governments and other organizations, or of organizational units within them, and formulate and review their policies, laws, rules and regulations.
 - Chief Executives, Senior Officials and Legislators
 - Administrative and Commercial Managers
 - Production and Specialized Services Managers
 - Hospitality, Retail and Other Services Managers
- Professional. Professionals increase the existing stock of knowledge; apply scientific or artistic concepts and theories; teach about the foregoing in a systematic manner; or engage in any combination of these activities.
 - Science and Engineering Professionals
 - Health Professionals
 - Teaching Professionals
 - Business and Administration Professionals
 - Information and Communications Technology Professionals
 - Legal, Social and Cultural Professionals
- Technicians and associate professionals. Technicians and associate professionals perform technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations.
 - Science and Engineering Associate Professionals
 - Health Associate Professionals
 - Business and Administration Associate Professionals
 - Legal, Social, Cultural and Related Associate Professionals
 - Information and Communications Technicians
- Clerical support workers. Clerical support workers record, organize, store, compute and retrieve information, and perform a number of clerical duties in connection with money-handling operations, travel arrangements, requests for information, and appointments.
 - General and Keyboard Clerks
 - Customer Services Clerks
 - Numerical and Material Recording Clerks
 - Other Clerical Support Workers
- Service and sales workers. Services and sales workers provide personal and protective services related to travel, housekeeping, catering, personal care, protection against fire and unlawful acts; or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets.
 - Personal Services Workers
 - Sales Workers
 - Personal Care Workers
 - Protective Services Workers

- Skilled agricultural, forestry and fishery workers. Skilled agricultural, forestry and fishery workers grow and harvest field or tree and shrub crops; gather wild fruits and plants; breed, tend or hunt animals; produce a variety of animal husbandry products; cultivate, conserve and exploit forests; breed or catch fish; and cultivate or gather other forms of aquatic life in order to provide food, shelter and income for themselves and their households.
 - Market-oriented Skilled Agricultural Workers
 - Market-oriented Skilled Forestry, Fishery and Hunting Workers
 - Subsistence Farmers, Fishers, Hunters and Gatherers
- Craft and related trades workers. Craft and related trades workers apply specific technical and practical knowledge and skills to construct and maintain buildings; form metal; erect metal structures; set machine tools or make, fit, maintain and repair machinery, equipment or tools; carry out printing work; and produce or process foodstuffs, textiles, wooden, metal and other articles, including handicraft goods.
 - Building and Related Trades Workers (excluding electricians)
 - Metal, Machinery and Related Trades Workers
 - Handicraft and Printing Workers
 - Electrical and Electronics Trades Workers
 - Food Processing, Woodworking, Garment and Other Craft and Related Trades Workers
- Plant and machine operators, and assemblers. Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control; drive and operate trains, motor vehicles and mobile machinery and equipment; or assemble products from component parts according to strict specifications and procedures.
 - Stationary Plant and Machine Operators
 - Assemblers
 - Drivers and Mobile Plant Operators
- Elementary occupations. Elementary occupations involve the performance of simple and routine tasks which may require the use of hand-held tools and considerable physical effort.
 - Cleaners and Helpers
 - Agricultural, Forestry and Fishery Laborers
 - Laborers in Mining, Construction, Manufacturing and Transport
 - Food Preparation Assistants
 - Street and Related Sales and Services Workers
 - Refuse Workers and Other Elementary Workers
- Armed forces occupations. Armed forces occupations include all jobs held by members of the armed forces. Members of the armed forces are those personnel who are currently serving in the armed forces, including auxiliary services, whether on a voluntary or compulsory basis, and who are not free to accept civilian employment and are subject to military discipline.
 - Commissioned Armed Forces Officers
 - Non-commissioned Armed Forces Officers
 - Armed Forces Occupations, Other Ranks

Income

What is your gross household income?

_____ (local currency)

2. Health status

Mobility limitations

[Custom questions compiled from multiple sources]

We recommend the following two options (Standard questionnaire or Questions on performance-based measures of mobility):

1. Standard Questionnaires: Short Form (SF)-36⁴
2. Questions on performance-based measures of mobility⁵

Do you difficulty in walking 2.0km?

- Able to manage without difficulty
- Able to manage with some difficulty
- Able to manage with great deal of difficulty
- Able to manage only with help of another person
- Unable to manage even with help

Do you difficulty in walking 0.5km?

- Able to manage without difficulty
- Able to manage with some difficulty
- Able to manage with great deal of difficulty
- Able to manage only with help of another person
- Unable to manage even with help

Do you difficulty in walking 1 flight of stairs?

- Able to manage without difficulty
- Able to manage with some difficulty
- Able to manage with great deal of difficulty
- Able to manage only with help of another person
- Unable to manage even with help

Medication use

[Custom questions compiled from multiple sources]

Do you currently use any prescription medicines?

- Yes
- No

If yes, which of these, and indicate the age when you started with such medicine:

- Medication for high blood pressure (age first time)
- Cholesterol lowering medication (age first time)
- Medication for asthma or COPD (age first time)
- Medication for anxiety or depression (age first time)
- Medication for thyroidea (age first time)
- Medication for allergy: Tablets or nasal spray (age first time)
- Glucose lowering medication
- Anti-inflammatory medication
- Chemotherapy
- Urological medication
- Birth controle
- Neurological medication

Chronic Health status, long standing illness

[Custom questions compiled from multiple sources]

Have you had, or do you have, any of the following diseases? If yes, what was your age when you had it for the first time?

- Angina (age first time)
- Myocardial infarction (heart attack) (age first time)
- Heart failure (age first time)
- Peripheral vascular problems
- Atrial fibrillation (age first time)
- Stroke/brain haemorrhage (age first time)
- Thrombosis
- Pulmonary embolism
- Asthma (age first time)
- COPD or emphysema (age first time)
- Diabetes (age first time)
- Hypothyroidism (too low metabolism) (age first time)
- Hyperthyroidism (too high metabolism) (age first time)
- Cancer (age first time)
- Migraine (age first time)
- Psoriasis (age first time)
- Kidney disease (age first time)

- Arthritis (rheumatoid arthritis) (age first time)
- Bechterew's disease, also called Ankylosing spondylitis (age first time)
- Gout (age first time)
- Mental health problems you sought help for (age first time)
- Osteoporosis
- Sleep apnea
- Arthrosis
- Nerve disease
- Hearing/ear disease
- Eye disease
- Infection

Familial disease history

[Custom questions compiled from multiple sources]

Do your parents, siblings or children have or ever have had some of the following diseases before the age of 60?

- Asthma (yes, no, I don't know)
- Hay fever/nasal allergies (yes, no, I don't know)
- Chronic bronchitis, emphysema or COPD (yes, no, I don't know)
- Anxiety or depression (yes, no, I don't know)
- Myocardial infarction (heart attack) before the age of 60 (yes, no, I don't know)
- Diabetes (yes, no, I don't know)
- Stroke or brain haemorrhage before the age of 60 (yes, no, I don't know)
- Cancer (yes, no, I don't know)

Self-rated health

[Adopted from Idler et al., 1997⁶]

In general, would you say your health is:

- Excellent
- Very good
- Good
- Fair
- Poor

Compared to one year ago, how would you rate your health in general now?

- Much better now than one year ago
- Somewhat better now than one year ago
- About the same
- Somewhat worse now than one year ago
- Much worse now than one year ago

3. Diet

[Custom questions compiled from multiple sources]

1. Standard Questionnaires: Food Frequency Question (FFQ) from European Prospective Investigation of Cancer (EPIC) study⁷

Questions adapted from Survey of Health, Aging and Retirement in Europe (SHARE) study

Dairy Products

In the past month, how often did you have a serving of dairy products such as a glass of milk, cheese in a sandwich, a cup of yogurt or a can of high protein supplement?

- Every day
- 3-6 times a week
- Twice a week
- Once a week
- Less than once a week

Legumes and Eggs

In the past month, how often did you have a serving of legumes (200g), beans (3 tablespoons) or eggs (2 eggs/serving)?

- Every day
- 3-6 times a week
- Twice a week
- Once a week
- Less than once a week

Meat

In the past month, how often did you eat meat, fish, or poultry?

- Every day
- 3-6 times a week
- Twice a week
- Once a week
- Less than once a week

Fruits and Vegetables

In the past month, how often did you consume a serving of fruits or vegetables?

*A serving of fruit: 2 or more small fruit – for example, 2 plums, 2 satsumas, 2 kiwi fruit, 3 apricots, 6 lychees, 7 strawberries or 14 cherries.

*A serving of vegetable: 2 broccoli spears or 4 heaped tablespoons of cooked kale, spinach, spring greens or green beans.

- Every day
- 3-6 times a week
- Twice a week
- Once a week
- Less than once a week

4. Self-reported non-physical activity behaviours

Smoking Habits⁸

[Adapted from UK Biobank questionnaire]

1. Which of the following best describes your smoking status?

- I have never smoked (section complete)
- I used to smoke, but not anymore. (->Q2)
- I only smoke occasionally. (->Q2)
- I currently smoke on most or all days. (->Q4)

2. In the past, how often have you smoked?

- Smoked on most or all days (->Q4)
- Smoked occasionally (->Q3)
- Just tried once or twice (->Q3)

3. In your lifetime, have you smoked a total of at least 100 smokes?

- Yes
- No
- Do not know

4. What type of tobacco do/did you mainly smoke?

- Manufactured cigarettes (-> Q5)
- Hand-rolled cigarettes (-> Q5)
- Cigars or pipes (section complete)
- Electronic cigarettes (-> Q5)
- None of the above (section complete)

5. How many cigarettes do/did you smoke on average per day?

- _____ a day (*Enter integer*)
- Less than one a day
- Do not know

Alcohol Intake⁹

[Adapted from UK biobank questionnaire]

- 1. In the last 12 months, how often did you drink alcohol?**
 - Daily or almost daily (->Q9-Q14)
 - Three or four times a week (->Q9-Q14)
 - Once or twice a week (->Q9-Q14)
 - One to three times a month (->Q3-Q8)
 - Social occasions only (->Q3-Q8)
 - Never (->Q2)

- 2. Did you previously drink alcohol?**
 - a. Yes (->Q18)
 - b. No (section complete)

- 3. In an average MONTH, how many glasses of RED wine would you drink? (There are six glasses in an average bottle)**
 - _____ glasses (*Enter integer*)
 - Do not know

- 4. In an average MONTH, how many glasses of WHITE wine or champagne would you drink? (There are six glasses in an average bottle)**
 - _____ glasses (*Enter integer*)
 - Do not know

- 5. In an average MONTH, how many pints of beer or cider would you drink? (Include bitter, large, stout, ale, Guinness)**
 - _____ pints (*Enter integer*)
 - Do not know

- 6. In an average MONTH, how many measures of spirits or liqueurs would you drink? (There are 25 standard measures in a normal sized bottle; spirits include drinks such as whisky, gin, rum, vodka, brandy)**
 - _____ measures (*Enter integer*)
 - Do not know

- 7. In an average MONTH, how many glasses of fortified wine would you drink? (There are 12 glasses in an average bottle; fortified wines include drinks such as sherry, port, vermouth)**
 - _____ glasses (*Enter integer*)
 - Do not know

- 8. In an average MONTH, how many glasses of other alcoholic drinks (such as alcopops) would you drink?**
 - _____ glasses (*Enter integer*)
 - Do not know

(->Q15)

- 9 In an average WEEK, how many glasses of RED wine would you drink? (There are six glasses in an average bottle)**
- _____ glasses (*Enter integer*)
 - Do not know
- 10 In an average WEEK, how many glasses of WHITE wine or champagne would you drink? (There are six glasses in an average bottle)**
- _____ glasses (*Enter integer*)
 - Do not know
- 11 In an average WEEK, how many pints of beer or cider would you drink? (Include bitter, large, stout, ale, Guinness)**
- _____ pints (*Enter integer*)
 - Do not know
- 12 In an average WEEK, how many measures of spirits or liqueurs would you drink? (There are 25 standard measures in a normal sized bottle; spirits include drinks such as whisky, gin, rum, vodka, brandy)**
- _____ measures (*Enter integer*)
 - Do not know
- 13 In an average WEEK, how many glasses of fortified wine would you drink? (There are 12 glasses in an average bottle; fortified wines include drinks such as sherry, port, vermouth)**
- _____ glasses (*Enter integer*)
 - Do not know
- 14 In an average WEEK, how many glasses of other alcoholic drinks (such as alcopops) would you drink?**
- _____ glasses (*Enter integer*)
 - Do not know
- (->Q15)
- 15 When you drink alcohol is it usually with meal?**
- Yes
 - No
 - It varies
 - Do not know
- 16 Compared to 10 years ago, do you drink?**
- More nowadays
 - About the same
 - Less nowadays (->Q17)
 - Do not know

17 Why did you reduce the amount you drank?

- Illness or ill health
- Doctor's advice
- Health precaution
- Financial reasons
- Other reason
- Do not know

(section complete)

18 Why did you stop drinking alcohol?

- Illness or ill health
- Doctor's advice
- Health precaution
- Financial reasons
- Other reason
- Do not know

(section complete)

5. Mental health status & cognitive function

Mental health status (stress, depression, anxiety)

[Recommendation of standard questionnaires]

- Patient Health Questionnaire (PHQ-9)¹⁰
OR
- Center for Epidemiologic Studies Depression Scale (CES-D)¹¹

Cognitive function

[Questions adopted from multiple questionnaires]

Global Cognition

- Montreal Cognitive Assessment (MoCA)¹²
OR
- Mini-Mental State Examination (MMSE)¹³

Multi-domain battery (protocols are described in each reference)

- Word list learning immediate and delayed recall (*Verbal learning and memory*)¹⁴
- Verbal fluency (*Executive function*)¹⁵
- Letter-digit substitution test (*processing speed*)¹⁶
- Trial making test (*processing speed and executive function*)¹⁷
- Letter cancelling test (*attention*)¹⁵

6. Self-reported Physical Activity (PA) behaviors

[Recommendation of standard questionnaires]

- Global Physical Activity Questionnaires (GPAQ) but **excluding the 10-minute bout criteria throughout the questionnaire**

7. Self-reported Sedentary behavior

[Recommendation of standard questionnaires]

- Sedentary Behavior Questionnaire (SBQ)
OR
- International Sedentary Assessment Tool (ISAT)

If sedentary behaviour questionnaires are not feasible for inclusion, we suggest including, at a minimum, questions on the following items:

- Total sitting time per day
- Sitting time by domain per day (occupational, transportation, leisure)
- Total screen time per day
- Screen time by domain per day (occupational and leisure)

8. Sleep

[Custom questions compiled from multiple sources]

Five sleep characteristics (adopted from UK Biobank¹⁸)

Chronotype preference

Do you consider yourself to be definitely (i) a “morning” person, (ii) more a “morning” than “evening” person, (iii) ‘more an “evening” than “morning” person’, or (iv) definitely an “evening” person?

Sleep duration

Recorded as number of reported hours by asking **About how many hours sleep do you get in every 24 h? (include naps)**. Given previously established U-shape relationships with CVD, sleep duration was categorised as short (<7 h/day), normal (7–8 h/day), and long (≥9 h/day) consistent with previous studies¹⁹.

Insomnia symptoms

Do you have trouble falling asleep at night or do you wake up in the middle of the night? with responses of (i) never/rarely, (ii) sometimes, or (iii) usually.

Snoring

Does your partner or a close relative or friend complain about your snoring? with responses of (i) yes or (ii) no.

Subjective daytime sleepiness

How likely are you to doze off or fall asleep during the daytime when you don’t mean to? (e.g., when working, reading or driving) with responses of (i) never/rarely, (ii) sometimes, (iii) often, or (iv) all of the time.

OR

Sleep duration (modified from NHANES²⁰)

How many hours of sleep do you usually get a night (or when you usually sleep)? _____

Quality of sleep

Short PSQI (Pittsburgh Sleep Quality Index²¹)

SECTION II—PHYSICAL MEASUREMENTS

1. Anthropometrics

Height (centimetres)

[Custom protocol(s) compiled from multiple sources]

RECOMMENDED EQUIPMENT / EQUIPMENT REQUIRED:

- Stadiometer (resolution of 1 centimetre)

Protocol for measuring height:

1. Participants are asked to remove their shoes, heavy outer garments, and hair ornaments and head dress.
2. The participant is asked to stand with his/her back to the height rule. The back of the head, back, buttocks, calves and heels should be touching the stadiometer, feet together. The participant is asked to look straight.
3. The head piece of the stadiometer or the sliding part of the measuring rod is lowered so that the hair (if present) is pressed flat.
4. Height is recorded to the resolution of the nearest centimeter.

Weight (kilograms)

[Custom protocol(s) compiled from multiple sources]

RECOMMENDED EQUIPMENT / EQUIPMENT REQUIRED:

- Scale (resolution of 0.1 kilogram)

Protocol for measuring weight:

- Participants are asked to remove their heavy outer garments (jacket, coat, trousers, skirts, etc.) and shoes. If participants refuse to remove trousers or skirt, at least make them empty their pockets and record the fact in the data collection form.
- The participant stands in the centre of the platform, weight distributed evenly to both feet. Standing off-centre may affect measurement.
- The weight is recorded to the resolution of the nearest 0.1 kg.

Waist circumference (centimetres)

[Custom protocol(s) compiled from multiple sources]

RECOMMENDED EQUIPMENT / EQUIPMENTY REQUIRED:

- Flexible measuring tape (resolution of 1 centimetrer)

Protocol for measuring waist circumference:

1. Participants are asked to remove their clothes, except for light underwear. If this is not possible, for example due to cultural reasons, the alternative is to measure the circumference on the participants without heavy outer garments and record this fact in the data collection form. Tight clothing, including the belt, should be loosened and the pockets emptied.
2. Participants should be standing with their feet fairly close together (about 12-15 cm) with their weight equally distributed to each leg. Participants are asked to breathe normally.
3. Find the bottom of the ribs and the top of the hips
4. Wrap a flexible tape measure around the waist, midway between these points. The measuring tape is held firmly, ensuring its horizontal position. The tape should be loose enough to allow the observer to place one finger between the tape and the participant's body.
5. The reading of the measurement should be taken at the end of gentle exhaling. This will prevent participants from contracting their abdominal muscles or from holding their breath.

2. Biomedical risk factors

Blood pressure and heart rate

[Custom protocol(s) compiled from multiple sources]

RECOMMENDED EQUIPMENT / EQUIPMENTY REQUIRED:

Preferred digital measurement (with both blood pressure and heart rate), ideally the same device for all study participants and at every measurement/data collection wave.

- The participant sits quietly in rest for at least 5 minutes, with the right upper arm at approximately heart height, loosen tight clothing on the arm. Preferably have bare skin, but thin clothing can be allowed if the alternative is that the participant has to undress. There should be no clothing tightening over the cuff. The palm should face up. The arm should have a position so that the fossa cubiti has the same height as the intersection of the mid-calf. Line and the fourth intercostal space. If necessary, adjust the chair height/arm to the correct height.

- Blood pressure will be measured at the right arm (if lymph nodes are removed, take the left arm).
- In total, you have to measure 3x the blood pressure and heart rate.
- Wait 1 minute between every measurement.

Blood Samples

[Custom question(s) compiled from multiple sources]

ProPASS recommends fasting bloods, however both fasting and non-fasting blood samples are acceptable.

For Non-fasting samples: If fasting is not feasible, please record the exact time of the last meal using the following question: "When was the last time you have eaten?"

For Fasting samples: Participant should fast (no water, tea, coffee or food) and refrain from smoking for at least 8 hours.

As per standard procedures, both fasting and non-fasting blood samples will be taken and send to the lab (or samples will be frozen) within 4 hrs from collection. The exact protocol will depend on the specific biomarkers to be analysed. At a minimum, we recommend that the following biomarkers are collected:

- Blood Cell Count
- Glucose (Fasting/Non-Fasting)
- Insulin HbA1c Cholesterol (Total)
- HDL
- LDL
- Triglycerides
- C-reactive protein
- Cortisol
- Other biomedical risk factor

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APPENDIX

- Global Physical Activity Questionnaires (GPAQ)
- Sedentary Behavior Questionnaire (SBQ)
- International Sedentary Assessment Tool (ISAT)

Global Physical Activity Questionnaire (GPAQ*)

WHO STEPS (<https://www.who.int/publications/m/item/global-physical-activity-questionnaire>)

*Modified to remove the 10 minute minimum reporting threshold

Physical Activity			
<p>Next I am going to ask you about the time you spend doing different types of physical activity in a typical week. Please answer these questions even if you do not consider yourself to be a physically active person.</p> <p>Think first about the time you spend doing work. Think of work as the things that you have to do such as paid or unpaid work, study/training, household chores, harvesting food/crops, fishing or hunting for food, seeking employment. <i>[Insert other examples if needed]</i>. In answering the following questions 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that require moderate physical effort and cause small increases in breathing or heart rate.</p>			
Questions		Response	Code
Activity at work			
1	Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like <i>[carrying or lifting heavy loads, digging or construction work]</i> ? <i>[INSERT EXAMPLES] (USE SHOWCARD)</i>	Yes 1 No 2 <i>If No, go to P 4</i>	P1
2	In a typical week, on how many days do you do vigorous-intensity activities as part of your work?	Number of days <input type="text"/>	P2
3	How much time do you spend doing vigorous-intensity activities at work on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P3 (a-b)
4	Does your work involve moderate-intensity activity that causes small increases in breathing or heart rate such as brisk walking <i>[or carrying light loads]</i> ? <i>[INSERT EXAMPLES] (USE SHOWCARD)</i>	Yes 1 No 2 <i>If No, go to P 7</i>	P4
5	In a typical week, on how many days do you do moderate-intensity activities as part of your work?	Number of days <input type="text"/>	P5
6	How much time do you spend doing moderate-intensity activities at work on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P6 (a-b)
Travel to and from places			
<p>The next questions exclude the physical activities at work that you have already mentioned.</p> <p>Now I would like to ask you about the usual way you travel to and from places. For example to work, for shopping, to market, to place of worship. <i>[insert other examples if needed]</i></p>			
7	Do you walk or use a bicycle (<i>pedal cycle</i>) to get to and from places?	Yes 1 No 2 <i>If No, go to P 10</i>	P7
8	In a typical week, on how many days do you walk or bicycle to get to and from places?	Number of days <input type="text"/>	P8
9	How much time do you spend walking or bicycling for travel on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P9 (a-b)
Recreational activities			
<p>The next questions exclude the work and transport activities that you have already mentioned.</p> <p>Now I would like to ask you about sports, fitness and recreational activities (<i>leisure</i>), <i>[insert relevant terms]</i>.</p>			
10	Do you do any vigorous-intensity sports, fitness or recreational (<i>leisure</i>) activities that cause large increases in breathing or heart rate like <i>[running or football]</i> ? <i>[INSERT EXAMPLES] (USE SHOWCARD)</i>	Yes 1 No 2 <i>If No, go to P 13</i>	P10
11	In a typical week, on how many days do you do vigorous-intensity sports, fitness or recreational (<i>leisure</i>) activities?	Number of days <input type="text"/>	P11
12	How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P12 (a-b)

Continued on next page

GPAQ, Continued

Physical Activity (recreational activities) contd.			
Questions	Response	Code	
13	Do you do any moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities that causes a small increase in breathing or heart rate such as brisk walking, (<i>cycling, swimming, volleyball</i>)? [INSERT EXAMPLES] (USE SHOWCARD)	Yes 1 No 2 If No, go to P16	P13
14	In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities?	Number of days <input type="text"/>	P14
15	How much time do you spend doing moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P15 (a-b)
Sedentary behaviour			
The following question is about sitting or reclining at work, at home, getting to and from places, or with friends including time spent [sitting at a desk, sitting with friends, travelling in car, bus, train, reading, playing cards or watching television], but do not include time spent sleeping. [INSERT EXAMPLES] (USE SHOWCARD)			
16	How much time do you usually spend sitting or reclining on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs min s	P16 (a-b)

International Sedentary Assessment Tool (ISAT) International Sedentary
Assessment Tool (ISAT) – WEEKDAY

The following questions are about activities you did over the **past week while sitting or lying down**. Do not count the time you spent in bed sleeping or napping.

For each of the following activities only count the time when this was your main activity.

For example if you are watching television and surfing the internet, count it as television time or computer time, but not as both

On a typical WEEKDAY in the past week, how much time did you spend sitting or lying down and...

SEDENTARY ITEM	TIME	
1. Watching TV or using a computer, tablet or smartphone. <i>(Count time watching videos, playing computer games, emailing or using the Internet. Do not include time spent on a computer at work or at school.)</i>	__ hours	_____ min
2. Watching television or videos. <i>(Count time spent watching television, DVDs and online videos)</i>	__ hours	_____ min
3. Using a computer. <i>(Count time spent on things such as computers, laptops, Xbox, PlayStation, iPod, iPad or other tablet, or a smartphone, YouTube, Facebook or other social networking tools, and the Internet).</i>	__ hours	_____ min
4. During the last 7 days, how much time did you usually spend sitting on a weekday? <i>(Include time spent at school or work, at home, while doing course work, and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television).</i>	__ hours	_____ min
5. Sitting and driving in a car, bus, or train.	__ hours	_____ min

<p>6. Sitting reading a book or magazine</p> <p><i>(Include reading done using electronic formats. Include time spent reading as part of your homework, but do not include time spent reading at work, during class time, during transportation or while exercising).</i></p>	__ hours	_____ min
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International Sedentary Assessment Tool (ISAT) – WEEKEND

The following questions are about activities you did over the **past week while sitting or lying down**. Do not count the time you spent in bed sleeping or napping.

For each of the following activities only count the time when this was your main activity.

For example if you are watching television and surfing the internet, count it as television time or computer time, but not as both

On a typical WEEKEND DAY in the past week, how much time did you spend sitting or lying down and...

SEDENTARY ITEM	TIME	
1. Watching TV or using a computer, tablet or smartphone. <i>(Count time watching videos, playing computer games, emailing or using the Internet. Do not include time spent on a computer at work or at school.)</i>	__ hours	_____ min
2. Watching television or videos. <i>(Count time spent watching television, DVDs and online videos)</i>	__ hours	_____ min
3. Using a computer. <i>(Count time spent on things such as computers, laptops, Xbox, PlayStation, iPod, iPad or other tablet, or a smartphone, YouTube, Facebook or other social networking tools, and the Internet).</i>	__ hours	_____ min
4. During the last 7 days, how much time did you usually spend sitting on a weekend day? <i>(Include time spent at school or work, at home, while doing course work, and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television).</i>	__ hours	_____ min
5. Sitting and driving in a car, bus, or train.	__ hours	_____ min
6. Sitting reading a book or magazine	__ hours	_____ min

<p><i>(Include reading done using electronic formats. Include time spent reading as part of your homework, but do not include time spent reading at work, during class time, during transportation or while exercising).</i></p>		
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