**mMARCH Network**

**Ecological Momentary Assessment Script**

# **Questions asked once in the morning**

# Morning and Sleep Behavior

|  |  |
| --- | --- |
| * About what time did you go to bed last night (regardless of the time you actually fell asleep)? | Subject input |
| * What time did you turn off the lights (including TV, phone, tablets)? | Subject input |
| * What time did you close your eyes to try to go to sleep? | Subject input |
| * How long did it take you to fall asleep? | Subject input |
| * How many times did you wake up, not counting your final awakening? | Subject input |
| * In total, how long did these awakenings last? | Subject input |
| * What time did you wake up? | Subject input |
| * What time did you get out of bed for the day? | Subject input |
| * About how many hours did you actually sleep? | Subject input |
| * How would you rate the quality of your sleep? | Very poor, poor, fair, good, very good  (1-5) |
| * How refreshed did you feel when you woke up? | Not at all refreshed 🡪 fully refreshed  (1-7) |
| * Which (if any) of the following sleep problems did you have last night? | Difficulty falling asleep (0,1), awakening during the night (0,1), awakening too early (0,1), feeling unrefreshed or unrestored despite enough hours of sleep (0,1), nightmares (0,1), sleep walking (0,1), other sleep problem (0,1)  *Multi-choice* |
| * If any =1 |  |
| * + Were the sleep problem due to: | Noise or other disturbances (0,1), Pain (0,1), Worry (0,1), Other thoughts (0,1), Other reason (0,1) |
| * Did you take sleeping pills or anything else to help you sleep last night? | No/yes (0,1) |

# **Questions asked four times daily**

# *(including morning and evening assessments)*

# Context of Assessment

|  |  |
| --- | --- |
| * Have you taken your activity monitor off since the last assessment? | No/Yes (0,1) |
| * + Yes: |  |
| * + - When did you take it off? | Subject input |
| * + - When did you put it back on? | Subject input |
| * Where are you right now? | In my home (0,1) , in home of relative or friend (0,1), at work or in class (0,1), in a restaurant, café, or bar (0,1), in a store or shop (0,1), in the gym or fitness center (0,1), in a hospital or doctor’s office (0,1), in a vehicle (car, bus…) (0,1), in a public building (0,1), in a park or garden (0,1), other place inside (0,1), other place outside (0,1) |
| * Which places have you been since the last assessment? | In my home (0,1) , in home of relative or friend (0,1), at work or in class (0,1), in a restaurant, café, or bar (0,1), in a store or shop (0,1), in the gym or fitness center (0,1), in a hospital or doctor’s office (0,1), in a vehicle (car, bus…) (0,1), in a public building (0,1), in a park or garden (0,1), other place inside (0,1), other place outside (0,1)  *Multi-choice* |
| * Who is with you at this moment? | No one (0,1), family member, partner, boyfriend or girlfriend (0,1), friend (0,1), colleague or classmate (0,1), stranger (0,1), a pet (0,1), other (0,1)  *Multi-choice* |
| * Who have you been with since the last assessment? | No one (0,1), family member, partner, boyfriend or girlfriend (0,1), friend (0,1), colleague or classmate (0,1), stranger (0,1), a pet (0,1), other (0,1)  *Multi-choice* |
| * What are you doing at this moment? | Nothing or waiting (0,1), napping/resting (0,1), eating (0,1), household chores (0,1), working (paid or volunteer) (0,1), homework (0,1), shopping (0,1), personal hygiene care (0,1), physical leisure or sports (0,1), personal exercise (0,1), walking the dog (0,1), traveling or commuting (0,1)¸ watching tv (0,1), reading (0,1), listening to music (0,1), using a computer/electronic device (0,1), talking on the phone (0,1)¸talking in person (0,1), texting by phone (0,1), other nonphysical leisure (0,1), other activity (0,1)  *Multi-choice* |
| * Which of these activities have you done since the last assessment? | Nothing or waiting (0,1), napping/resting (0,1), eating (0,1), household chores (0,1), working (paid or volunteer) (0,1), homework (0,1), shopping (0,1), personal hygiene care (0,1), physical leisure or sports (0,1), personal exercise (0,1), walking the dog (0,1), traveling or commuting (0,1)¸ watching tv (0,1), reading (0,1), listening to music (0,1), using a computer/electronic device (0,1), talking on the phone (0,1)¸talking in person (0,1), texting by phone (0,1), other nonphysical leisure (0,1), other activity (0,1)  *Multi-choice* |

# Mood Circumplex and Physical States

|  |  |
| --- | --- |
| * How happy versus sad do you feel right now? | Very cheerful/happy 🡪 Very sad/depressed/unhappy  (1-7) |
| * How happy do you feel right now? | No emotion -> Very cheerful/happy (1-7) |
| * How sad do you feel right now? | No emotion -> Very sad/depressed/unhappy (1-7) |
| * How relaxed versus anxious do you feel right now? | Very relaxed/calm 🡪 Very nervous/anxious  (1-7) |
| * How calm vs. excited do you feel right now? | Very calm/quiet 🡪 Very excited/aroused  (1-7) |
| * How tired vs. energetic do you feel right now? | Very tired/sluggish 🡪 Very energetic/ lively  (1-7) |
| * How well can you concentrate or focus right now? | Very focused/attentive 🡪 Very unfocused/distracted  (1-7) |
| * How irritable or easily angered do you feel right now? | Not at all irritable/angry 🡪 Very irritable/angry  (1-7) |
| * Do you feel worried right now? | Not at all worried -> Very worried (1-7) |
| * Do you feel guilty right now? | Not at all guilty -> Very guilty (1-7) |
| * How well can you make decisions right now? | Not at all/Very indecisive -> Very well/Very decisive (1-7) |
| * How quick is your thinking? | Very quick/lots of ideas 🡪 Slow/cannot think of things  (1-7) |
| * How much are you able to enjoy and feel pleasure in things? | Really enjoying things 🡪 No pleasure or enjoyment  (1-7) |
| * How fidgety or restless do you feel right now compared to your usual self? | Not at all restless 🡪 Very restless/fidgety/cannot sit still  (1-7) |
| * How hungry do you feel right now? | Not at all hungry/full 🡪 Extremely hungry  (1-7) |
| * How sleepy do you feel right now? | Not at all sleepy -> very sleepy (1-7) |

3a. Optional: Positive and Negative Thoughts

*(developed for studies of suicide, depression, treatment, Bordeaux, Toronto, and NIMH youth)*

|  |  |
| --- | --- |
| * To what extent are you having positive thoughts, thinking about nice experiences or things that make you feel good? | (1=Not at all, 7=Very frequently) |
| * To what extent are you having negative thoughts, thinking about unpleasant experiences or things that make you feel bad? | (1=Not at all, 7= Very frequently) |
| * + If response is 2-7 |  |
| * + - Were these thoughts about: | Things you did that you regret (0,1)  Things that happened to you or to others (0,1)  Worries that you have (0,1)  Other negative thoughts (0,1) |
| * + - How severe or disturbing would you say these thoughts were? | 1= Not at all severe or disturbing🡪 7= Very severe or disturbing |
| * + - Were these thoughts about things that could be dangerous for you physically? | No/Yes (0,1) |
| * + - * If response is 1 (yes) |  |
| * + - * + Since the last signal did you have thoughts of harming yourself or of suicide? | No/Yes (0,1) |
| [If this response is 1 (yes), the following warning appears:]  “IMPORTANT: The information you are providing now is not immediately transmitted to your doctor or to people who can help you. If you think that you are at the slightest risk of hurting yourself, please call the following number now to talk about it. Someone is available at any time of the day or night: XXXX”  (note to the Team: the contact information is obviously important to think through, so that it is available 24/7.  Note to investigators: Should this message be completed by minors, laws by country or according to human research approval boards may also require parents to be informed) |  |

# Physical Activity

|  |  |
| --- | --- |
| * Since the last assessment, did you have a nap or rest? | No/yes (0,1) |
| * + Yes: |  |
| * + - How long was your nap or rest? | Subject input |
| * + - Did you actually fall asleep during the nap or rest? | No/yes (0,1) |
| * Please select the level of activities you did since the last questionnaire. | Vigorous activities (e.g. running, fast cycling, heavy lifting or digging ) (0,1), Moderate activities (e.g. tennis, bicycling, carrying light loads) (0,1), Light activities (e.g. walking, climbing stairs, routine household chores) (0,1)  *Multi-choice* |
| * + Vigorous activities: |  |
| * + - Since the last questionnaire, how many minutes did you do vigorous activities including intensive sports or exercise (such as running or fast cycling) or intensive physical work (such as heavy lifting or digging)? | Subject input |
| * + - Was this vigorous activity (or activities) part of a planned workout or exercise routine? | No/yes (0,1) |
| * + Moderate activities: |  |
| * + - Since the last questionnaire, how many minutes did you do moderate activities (activities that make you breathe somewhat harder than usual such as playing tennis, bicycling, carrying light loads) | Subject input |
| * + - Was this moderate activity (or activities) part of a planned workout or exercise routine? | No/yes (0,1) |
| * + Light activities |  |
| * + - Since the last questionnaire, how many minutes did you do light activities (activities that may not make you breathe somewhat harder than usual such as walking, climbing stairs, routine household chores, etc.) | Subject input |
| * + - Was this light activity (or activities) part of a planned workout or exercise routine? | No/yes (0,1) |

# Intake: Food/drink/substances

# *(optional: upload photo of food)*

|  |  |
| --- | --- |
| * Since the last questionnaire, did you drink: | Water (0,1), Milk (0,1), A caffeinated beverage (like coffee, tea, soda…) (0,1), An alcoholic beverage (wine, beer, liquor…) (0,1), A beverage containing sugar like juice or caffeine free soda (0,1), Another type of drink (0,1)  *Multi-choice* |
| * + Water: |  |
| * + - How many 8 oz glasses of water did you consume? | Subject input |
| * + Milk: |  |
| * + - How many 8 oz glasses of milk did you consume? | Subject input |
| * + Caffeinated beverage: |  |
| * + - What type of caffeinated beverage did you consume? | Soda (Coke, Pepsi, other caffeinated soda) (0,1), Energy drink (0,1), Coffee (0,1), Tea (0,1), Other (0,1)  *Multi-choice* |
| * + - How many 8 oz glasses of caffeinated drinks did you consume? | Subject input |
| * + Alcoholic beverage: |  |
| * + - What type of alcoholic beverage did you consume? | Red wine (0,1), White wine (0,1)¸Champagne/sparking wine (0,1), Beer(0,1), Cocktail (0,1), Whisky or other strong alcohol (0,1), Other type of alcoholic drink (0,1)  *Multi-choice* |
| * + - How many servings of alcohol did you consume? | Subject input  Servings=1 beer, 1 glass of wine or other 1 shot glass of strong alcoholic beverage |
| * + Drinks containing sugar: |  |
| * + - How many 8 oz glasses of high-sugar drinks (e.g., juice, soda, some coffee beverages) did you consume? | Subject input |
| * Since the last questionnaire, how many of each of the following did you have? | Snacks (e.g. candy bar, cookie, small bag of chips): 0-10, more than 10  Small meals: 0-5, more than 5  Regular/full meals: (0-3, more than 3)  Large meals: (0-2, more than 2) |
| * About what time did you eat? | Subject input |
| * For how long did you eat? | Subject input |
| * Please think about all the foods you ate since the last questionnaire. Please select all types of food you ate | Beef, pork or lamb (0,1), Chicken or other poultry (0,1), Eggs (0,1), Fish (0,1), Dairy (yogurt, milk, cheese) (0,1), Bread, pasta, cereal, or other starchy food (0,1), Fruits (0,1), Vegetables (0,1), Sweet foods or candy (0,1), Energy bars (0,1), Potato chips or other salty snacks (0,1)  *Multi-choice* |
| * + Sweet foods or candy: |  |
| * + - Did you eat chocolate? | No/yes (0,1) |
| * Since the last questionnaire, have you had any of these substances | Cigarettes (0,1), Cannabis/pot (0,1), Other drug (0,1)  *Multi-choice* |
| * + Cigarettes: |  |
| * + - How many cigarettes did you have? | Subject input |
| * + Cannabis/pot: |  |
| * + - How many joints did you have? | Subject input |
| * + Other drug |  |
| * + - What other drug did you use? | Cocaine (0,1)¸ Tranquilizers (0,1), Stimulants (0,1)¸ Heroin or other Opiate (0,1), Other drug (0,1)  *Multi-choice* |

# Life Events

|  |  |
| --- | --- |
| Since the last assessment, please think of the ONE event that affected you the most (positively or negatively), no matter how slightly. |  |
| * Which of the following categories best describes the area of your life in which the event occurred? | Work (0,1), Education (0,1), Family or friend relationships (0,1), Interactions with colleagues (0,1)¸ Interactions with strangers (0,1)¸ Housing or residence (0,1)¸ Leisure (0,1), Exercise (0,1)¸ Health (0,1), Finances (0,1), Religion or spirituality (0,1), Legal or judicial (0,1), Traveling or commuting (0,1), Other (0,1) |
| * To what degree did this event have a positive impact on you? | 1=No positive impact 🡪 7=Extremely positive |
| * To what degree did this event have a negative impact on you? | 1=No negative impact 🡪 7=Extremely negative |
| * Did more than one event occur that significantly influenced you? | No/yes (0,1) |
| * + If reponse is 1 (yes) |  |
| * + - To what degree did this other event have a positive impact on you? | 1=No positive impact 🡪 7=Extremely positive |
| * + - To what degree did this other event have a negative impact on you? | 1=No negative impact 🡪 7=Extremely negative |

# Physical Health

|  |  |
| --- | --- |
| * Are you having pain right now? | No/yes (0,1) |
| * + If response is 1 (yes): |  |
| * + - Where are you having pain? | Headache, (0,1) Joint/muscle (0,1)—back or neck, (0,1) Stomach/bowel, (0,1)  Other (0,1) |
| * + - How severe is your pain right now? | 1=Very minor pain 🡪 7=Extreme pain |
| * Have you experienced any pain since the last questionnaire? | No/yes (0,1) |
| * + If response is 1 (yes): |  |
| * + - Where did this pain occur? | Headache, (0,1) Joint/muscle (0,1)—back or neck, (0,1) Stomach/bowel, (0,1)  Other (0,1) |
| * How severe was the pain you experienced since the last questionnaire? | 1=Very minor pain 🡪 7=Extreme pain |
| 7a. Headache (optional) |  |
| * Are you currently experiencing a headache? | No/yes (0,1) |
| * If reponse is 1 (Yes): |  |
| * + Is this the same headache that you reported | No/yes (0/1) |
| * Have you experienced a headache since the last questionnaire? | No/yes (0,1)m |
| * + No: |  |
| * + - Since the last questionnaire, did you do any of the following to prevent a headache? | Take prescribed medication (0,1), Take over-the-counter medication (0,1)¸Reduce or change activities (0,1), Use relaxation, yoga or other techniques (0,1)¸ Rest or take a nap (0,1), Other prevention strategy (0,1)  *Multi-choice* |
| * + Yes: |  |
| * + - What time did the headache begin? | Subject input (include option ‘continued from prior assessment’) |
| * + - What time did the headache end? | Subject input (include ‘headache is still present’ among options) |
| * + - How intense is (or was) the headache? | 1=Very minor 🡪 7=Extremely intense |
| * + - Did the headache come on suddenly? | No/yes (0,1) |
| * + - Did something in particular trigger the headache? | No/yes (0,1) |
| * + - * If response is 1 (yes): |  |
| * + - * + What do you think triggered the headache? | Bright Light (0/1), Odor/smell (0/1), Noise (0/1), Food (0/1), Alcoholic Drink (0/1) ,Non-Alcoholic Beverage (0,1), Hunger (0/1), Thirst/dehydration (0/1), Pain (0/1), Exercise (0/1), Stress (0/1) Other (0,1), Unknown (0,1) |
| * + - Where is (or was) the headache? | Both sides of your head (0,1), Left side only (0,1), Right side only (0,1), Moved from one side to another (0,1) |
| * + - Is (or was) the pain throbbing, beating or pulsating? | No/yes (0,1) |
| * + - Does (or did) the headache pain increase with routine physical activity such as bending over or climbing stairs? | No/yes (0,1) |
| * + - Do (or did) you feel nauseated, vomit or have diarrhea? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * + - How much does (or did) light bother you? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * + - How much does (or did) noise such as music, talking, TV, bother you? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * + - How much does (or did) certain odors such as perfume, food, smoke, bother you? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * + - Which (if any) of the following vision changes did you experience? | No vision changes (0,1)  Blurred or distorted vision (0,1), Flashing lights, shapes (0,1), Blind spots or missing parts (0,1)  *Multi-choice* |
| * + - * When did those vision changes occur with respect to the onset of the headache pain? | Before headache pain (0,1), After headache pain (0,1) |
| * + - Is (or was) your headache accompanied by any numbing or tingling in certain body areas? | No/yes (0,1) |
| * + - * When did this numbing or tingling occur with respect to onset of the headache pain? | Before headache pain (0,1), After headache pain (0,1) |
| * + - Does (or did) the headache make it difficult to speak, think or express yourself? | No/yes (0,1) |
| * + - * When did this difficulty occur with respect to the onset of the headache? | Before headache pain (0,1), After headache pain (0,1) |
| * + - Which (if any) did you take to treat your headache? | No medications (0,1)  Over-the-counter medications (0,1), Prescription medications (0,1)  *Multi-choice* |
| * + - How much does (or did) the headache interfere with your activities? | Not at all, Mildly, Moderately, Severely  (1-4) |

# **Questions asked once in the evening**

# 8. Daily Events and Overall Health

|  |  |
| --- | --- |
| * How stressful was your day overall? | No stress experienced -> extreme stress experienced (1-7) |
| * What areas were stressful for you today? | None (0,1), Physical health (0,1), education or work (0,1), financial matters (0,1), relationship with friends (0,1), relationships with family (0,1), relationships with spouse/partner (0,1), interaction with strangers (0,1), Other (0,1) |
| * Was today a relatively typical day for you in terms of routines/stress? | No/yes (0,1) |
| * How was your physical health today? | Very poor 🡪 Very good/excellent  (1-7) |
| * Did you take any over-the-counter medications today? | No/yes (0,1) |
| * Did you take them for: | Pain (Headache, muscle or joint pain, etc.) (0,1), Allergies/cold (0,1), Fever/acute illness (0,1), Headache (0,1), Sleep problems (0,1), Other (0,1)  *Multi-choice* |
| * Did you take any prescription medications today? | No/yes (0,1) |
| * Which of the following conditions? | Birth control (0,1), Heart/blood pressure/cholesterol (0,1), Thyroid/metabolic (0,1), Sleep (0,1), Anxiety/depression (0,1), Attention/hyperactivity (0,1), Asthma/allergies/breathing problems (0,1), Arthritis, joint or back pain (0,1), Headache (0,1), Other (0,1)  *Multi-choice* |
| * FEMALES (ages 12-50) * Are you currently having your menstrual period? |  |

# 8a. Daily Events/ Health Items (Optional)

|  |  |
| --- | --- |
| * Did you feel like you had no physical energy, as if you were weighted down or had a heavy feeling in your arms or legs for most of the day? | No/yes (0,1) |
| * Do you have a cold, cough, or flu today? | No,yes (0,1) |
| * Did you have any of the following problems today? | Allergies (0,1), Asthma or respiratory difficulties (0,1), Gastrointestinal, nausea, vomiting, bowel or stomach problems (0,1), Muscle/joint pain (0,1), Heart racing or pounding (0,1), Headache (0,1) |
| * Allergies: |  |
| * How much did your allergies bother you today? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * Asthma or respiratory difficulties: |  |
| * How much did your asthma or respiratory difficulties bother you today? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * Gastro-intestinal, nausea, bowel or stomach problems: |  |
| * Which (if any) of the following gastro-intestinal/stomach symptoms did you have today? | Pain in your abdomen (0,1), Diarrhea (0,1), Nausea (0,1), Vomiting (0,1)  *Multi-choice* |
| * How much did this (or these) gastro-intestinal/stomach symptom(s) bother you today? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * Muscle/joint pain: |  |
| * How much did your muscle/joint pain bother you today? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * Heart racing or pounding: |  |
| * How much did your heart racing or pounding bother you today? | Not at all, Mildly, Moderately, Severely  (1-4) |
| * Dizziness, feeling light-headed or faint: |  |
| * Did these feelings occur in a particular situation (in a bus, in hot weather, or other condition?) | No/yes (0,1) |
| * Did you actually faint today? | No/yes (0,1) |
| * If you reported a headache present at any assessment today, how many hours did the headache(s) last in total? | Subject input, with option for no headache |

# Biological eSaliva (optional section)

* Saliva Instructions: Please take a saliva sample, and label according to instructions. Once you have finished completing the saliva sample (and have verified that it has the correct label), press the ‘FINISHED’ button below.
* Note to investigator: Sequentially-numbered labels must be provided to place on samples

1. Additional Measures: Photos of Meals (optional section)

* Implement instructions for participant to take photo of food from within the app.