Supplemental Digital Content 2

Muscle-strengthening Exercise Questionnaire Short Form (MSEQ-Short)

Your participation in muscle-strengthening exercise

The next set of questions are about your participation in **<u>muscle-strengthening exercise</u>**, sometimes called weight or resistance training.

When thinking about muscle-strengthening exercise, we are only interested in exercises that you do during your leisure or free time, and NOT done as part of your work/job, or as a part of household activities (chores).

The types of muscle-strengthening exercise we are interested in include:

- Using weight machines typically in a gym or fitness centre
- Bodyweight exercises including push-ups or sit-ups
- Resistance exercises using free weights like dumbbells or using resistance bands
- Holistic exercises including Yoga, Tai-Chi or Pilates
- 1. Do you do muscle-strengthening exercise in a usual week?

Yes		
No	>	Skip to next module

2. How many days, in a usual week, do you do muscle-strengthening exercise?

____ days per week

3. <u>On the day(s)</u> that you <u>do muscle-strengthening exercise</u>, please indicate <u>how long</u> you spend doing this activity?

___ minutes per day

4. On a scale from 0 to 10, how <u>hard do you feel</u> you are <u>working when doing muscle-</u> <u>strengthening exercise</u> with '0' being 'extremely easy' and '10' being 'extremely hard'

____ intensity of session

5. What types of muscle-strengthening exercise do you usually do?

Weight machines (Lat pulldown, bench press, leg press)	Yes or No
Resistance exercises (resistance bands/dumbbells)	Yes or No
Bodyweight exercises (push-ups, sit-ups)	Yes or No
Holistic exercises (Yoga, Tai-Chi and Pilates)	Yes or No

 When you do muscle-strengthening exercise, <u>do you usually do exercise that target or use</u> <u>the</u> following <u>muscle groups or parts of your body?</u>

Legs (e.g. squats, lunge, leg press)	Yes or No
Hips (e.g. bridges, lateral banded walk)	Yes or No
Back (e.g. lat pulldown, dumbbell row)	Yes or No
Abdomen (e.g. sit-ups, planking)	Yes or No
Chest (e.g. bench press, push-ups)	Yes or No
Shoulders (e.g. shoulder/overhead press)	Yes or No
Arms (e.g. bicep curl, tricep dips)	Yes or No

This is the end of the survey, thank you for participating.

Shakespear-Druery J, et al. BMJ Open Sp Ex Med 2022; 8:e001225. doi: 10.1136/bmjsem-2021-001225

Muscle-strengthening Exercise Questionnaire Long Form (MSEQ-Long)

Your participation in muscle-strengthening exercise

The next set of questions are about your participation in **muscle-strengthening exercise**, sometimes called weight or resistance training.

When thinking about muscle-strengthening exercise, we are only interested in exercises that you do during your leisure or free time, and NOT done as part of your work/job, or as a part of household activities (chores).

The types of muscle-strengthening exercise we are interested in include:

- Using weight machines typically in a gym or fitness centre
- Bodyweight exercises including push-ups or sit-ups
- Resistance exercises using free weights like dumbbells or using resistance bands
- Holistic exercises including Yoga, Tai-Chi or Pilates
 - 1. Do you do muscle-strengthening exercise in a usual week?

Yes

Skip to next module

WEIGHT MACHINES

1. When you do muscle-strengthening exercise, <u>do you use weight machines (Lat pulldown,</u> <u>bench press, leg press)</u>?

 Yes

 No

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2. How many days, in a usual week, do you use weight machines?

_____ days per week

3. In a usual week, <u>on the day(s)</u> that you use <u>weight machines</u>, please indicate <u>how long</u> you spend doing this activity per session?

____ minutes per day

 On a scale from 0 to 10, how <u>hard you feel</u> when <u>using weight machines</u> with '0' being 'extremely easy' and '10' being 'extremely hard'

____ intensity of session

5. When you use weight machines, <u>do you usually do exercise that target or use the following</u> <u>muscle groups or parts of your body</u>?

Legs (leg press, leg extension) Hips (machine hip/glute raises) Back (Lat pulldown, seated row) Abdomen (crunches, sit-ups) Chest (bench press) Shoulders (machine shoulder press) Arms (bicep curl, tricep push down)

 Yes or No

 Yes or No

BODYWEIGHT EXERCISES

6. When you do muscle-strengthening exercise, do you do **bodyweight exercises** (including pushups, sit-ups, planking)



7. How many days, in a usual week, do you use bodyweight exercises?

___ days per week

8. In a usual week, <u>on the day(s)</u> that you do <u>bodyweight exercises</u>, please indicate <u>how long</u> you spend doing this activity per session?

_____ minutes per day

9. On a scale from 0 to 10, how <u>hard you feel</u> when <u>doing bodyweight exercises</u> with '0' being 'extremely easy' and '10' being 'extremely hard'

_ intensity of session

10. When you do bodyweight exercises, <u>do you usually do exercise that target or use the following</u> <u>muscle groups or parts of your body</u>?

Legs (squats, lunges)	Yes or No
Hips (glute raises, lateral banded walk)	Yes or No
Back (pull-ups, back extension)	Yes or No
Abdomen (crunches, planking)	Yes or No
Chest (pull ups)	Yes or No
Shoulders (push ups)	Yes or No
Arms (dips, chair dips)	Yes or No

RESISTANCE EXERCISES

11. When you do muscle-strengthening exercise, do you do <u>resistance exercises</u>, such as using <u>resistance bands or free weights like dumbbells</u>?

 Yes

 No
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12. How <u>many days</u>, in a <u>usual week</u>, do you do resistance exercises, such as using resistance bands or free weights like dumbbells?

____ days per week

13. In a usual week, <u>on the day(s)</u> that you do <u>resistance exercises</u>, please indicate <u>how long</u> you spend doing this activity per session?

_____ minutes per day

14. On a scale from 0 to 10, how <u>hard you feel</u> when doing <u>resistance exercises</u> with '0' being 'extremely easy' and '10' being 'extremely hard'?

____ intensity of session

15. When you doing resistance exercises, do you usually do exercise that target or use the following muscle groups or parts of your body?

Legs (squats/lunges with dumbbells)	Yes or No
Hips (side lying leg raise with resistance band)	Yes or No
Back (dumbbell row)	Yes or No
Abdomen (weighted crunches, sit-ups)	Yes or No
Chest (dumbbell bench press)	Yes or No
Shoulders (dumbbell shoulder press)	Yes or No
Arms (bicep curl, tricep push down)	Yes or No

HOLISTIC EXERCISES

16. When you do muscle-strengthening exercise, do you do Holistic exercises (including Yoga, Tai-Chi and Pilates)?



17. How many days, in a usual week, do you holistic exercises?

_____ days per week

18. In a usual week, <u>on the day(s)</u> that you do <u>holistic exercises</u>, please indicate <u>how long</u> you spend doing this activity per session?

_____ minutes per day

19. On a scale from 0 to 10, how <u>hard you feel</u> when doing <u>holistic exercises</u> with '0' being 'extremely easy' and '10' being 'extremely hard'?

intensity of session

20. When you do holistic exercises, do you usually do exercise that target or use the following muscle groups or parts of your body?

Legs (squats/lunges)	Yes or No
Hips (bridges, single/double leg stretch)	Yes or No
Back (superman)	Yes or No
Abdomen (knee-to-elbow crunches, leg raises)	Yes or No
Chest (push-ups)	Yes or No
Shoulders (Plank, side plank)	Yes or No
Arms (Bird/dog)	Yes or No

This is the end of the questionnaire, thank you for participating.