# Health Belief Model questionnaire for weight management behaviour

## Perceived severity

**Emotional/mental health subscale**
- 1. Make me feel anxious and stressed
- 2. Cause others to find me less physically attractive.
- 3. Make me unhappy and depressed.
- 4. Lower my self-esteem.

**Physical health/fitness subscale**
- 5. Makes it harder to do the physical activity or sports that I enjoy.
- 6. Makes it harder to get enough sleep.
- 7. Cause pain in my knees.
- 8. Have an adverse effect on my health in years to come.
- 9. Increases my risk for diabetes, high blood pressure, cancer and other illnesses.

**Social/professional subscale**
- 10. Make it harder to make friends.
- 11. Make it harder to get a job because of a lack of fitness.
- 12. Take fun out of socializing with friends.
- 13. Makes me unable to wear clothes I want.

## Perceived susceptibility

**Lifestyle subscale**
- 1. I get <30 min of moderate-intensity physical activity on most days
- 2. I consume sugary beverages, foods, or snacks daily or on most days.
- 3. I eat fried foods or snacks daily or on most days.
- 4. I eat at fast-food restaurants ≥3 times/wk.
- 5. I don’t pay attention to the amounts I eat or drink.

**Environmental subscale**
- 6. One or both of my parents is overweight or obese.
- 7. I have a genetic history of being overweight or obese.

## Perceived barriers

**Practical concerns subscale**
- 1. Lower-calorie beverages, foods, and snacks are too expensive
- 2. Grocery shopping and preparing healthy foods would take up too much of my time.
- 3. Doing exercise/physical activity on most days would take up too much of my time.
- 4. My job/studying means more to me than adopting healthy eating and physical activity habits

**Emotional/mental health subscale**
- 5. I do not have any motivation to adopt healthy eating and physical activity habits
- 6. I enjoy eating fried foods and snacks more than baked, grilled or steamed versions
7. I enjoy consuming sugary beverages, foods, and snacks more than lower-calorie versions
8. I often turn to food when I want to feel comforted

**Awareness subscale**
9. I don’t know where to find accurate information about achieving and maintaining a healthy weight
10. I don’t know how to plan physical activity into my daily schedule
11. I don’t know where to shop for healthy beverages, foods, or snacks.
12. I don’t know how to prepare low-calorie beverages, foods, or snacks.
13. I don’t know how to choose low-calorie beverages, foods, or snacks.

**Perceived benefits**

| Emotional/mental health subscale | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|----------------------------------|-------------------|----------|-----------|-------|-----------------|
| 1. Reducing depression, anxiety and stress. |
| 2. Helping me to improve my body image. |
| 3. Improve my self-esteem |
| 4. Improve my mood |

| Physical health/fitness subscale | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|----------------------------------|-------------------|----------|-----------|-------|-----------------|
| 5. Make it easier to do the exercise/sports I enjoy |
| 6. Make me feel more energetic |
| 7. Increase my chances of having good health now and in the future |
| 8. Improve a symptom or health problem I have now |
| 9. Help me become more physically fit to improve my job performance |
| 10. Help me sleep better |
| 11. Make it easier to accomplish my daily activities |

| Social/professional subscale | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|-----------------------------|-------------------|----------|-----------|-------|-----------------|
| 12. Providing a better marriage opportunity. |
| 13. Make me feel more comfortable around others |

**Cue to action**

| Internal cues | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|---------------|-------------------|----------|-----------|-------|-----------------|
| 1. I looked in the mirror and was dissatisfied with my body |
| 2. My clothes fit uncomfortably tight |
| 3. I developed a health problem that can be improved by a healthy weight. |
| 4. I believe others judge me unfairly based on my weight |
| 5. A healthy weight would help me achieve my personal/professional goals |
| 6. A healthy weight would improve my depression, anxiety, or stress |

| External cues | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|---------------|-------------------|----------|-----------|-------|-----------------|
| 7. A physician/nurse/dietitian advised me to be at a healthy weight |
| 8. A loved one developed a serious health problem from being overweight or obese |
| 9. A family member or close friend advised me to be at a healthy weight |
| 10. I was presented information about the health risks of being overweight/obese in a college course |
| 11. I read on a radio, television or social media website about the health risks of being overweight/obese |
12. I saw an ad for a product or service that claimed to help me be at a healthy weight

| Perceived self-efficacy in dieting | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|-----------------------------------|---------------------|----------|-----------|-------|-----------------|

**Habits and preferences subscale**

1. I can eat three meals regularly.
2. I can eat meals in moderate amounts.
3. I can eat fresh food rather than processed one
4. I can refrain to eat sweets like candy and cookie.
5. I can refrain to eat fatty food like fried food.
6. I can refrain to drink carbonated drink like cola
7. I can eat various foods to avoid unbalance in diet.
8. I can refrain to eat just before going to bed.
9. I can eat slowly even when hungry
10. I can stop to eat before filling stomach even the food is delicious.
11. I can get up early to eat breakfast.
12. I can refrain to watch TV or read book when I eat.
13. I can refuse to eat when my family members or friends offer foods.

**Emotional/mental health subscale**

14. I can refrain to eat when I am bored.
15. I can refrain to eat when I am hungry.
16. I can refrain to eat when I am angry.
17. I can refrain to eat when I am depressed.
18. I can refrain to eat when I am anxious and excited.

| Perceived self-efficacy in exercise | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|-------------------------------------|---------------------|----------|-----------|-------|-----------------|

1. I can walk for distance as far as 15 minutes walk.
2. I can exercise until getting short of breath.
3. I can exercise in cold weather.
4. I can exercise in hot weather.
5. I can exercise with friends after university.
6. I can exercise instead of watching TV in leisure time.
7. I can use stairs instead of elevators.

**Behavioral intention of weight management**

| Diet therapy subscale | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|-----------------------|---------------------|----------|-----------|-------|-----------------|
1. I intend to control diet to reduce weight within six months.
2. I intend to visit dietitian to reduce weight within six months.
3. I intend to attend obese class if my college opens it.

| Exercise therapy subscale | Completely disagree | Disagree | Undecided | Agree | Completely agree |
|---------------------------|---------------------|----------|-----------|-------|-----------------|
4. I intend to exercise by myself regularly to reduce weight within six months.
5. I intend to attend sport centre or class to reduce weight within six months.