

**APPENDIX 1: STUDY TOOL QUESTIONNAIRE**

**TITLE:** Prevalence of Sarcopenia and associated factors among the Elderly in Mbarara District, Uganda.

Study number .....

Date ...../...../.....

| <b>SOCIODEMOGRAPHIC DATA</b>  |                                                                                                                                                                                                                                |    |                                                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------------|
| 1                             | Sex<br>1=Male<br>2=Female                                                                                                                                                                                                      | 2  | What is your age?<br>..... years                                                                                           |
| 3                             | What is your marital status?<br>1=Single<br>2=Married<br>3=Separated/Divorced                                                                                                                                                  | 4  | What is your level of education?<br>1=No education<br>2=Primary education<br>3=Secondary education<br>4=Tertiary education |
| 5                             | Where do you reside?<br>1=Urban<br>2=Rural                                                                                                                                                                                     | 6  | Do you own a home?<br>1=Rent<br>2=Belongs to them/partner<br>3=Belongs to the child/relatives                              |
| 7                             | What is your occupation?<br>1=Not Employed<br>2=Employed by someone<br>3=Self employed                                                                                                                                         | 8  | What is your income level monthly (UGX)?<br>1=Low (0-250,000)<br>2=Middle (250,001-1,000,000)<br>3=High (above 1,000,000)  |
| 9                             | Body Mass Index (kg/m <sup>2</sup> )<br>.....kg (weight) <input type="text"/><br>.....m (height) <input type="text"/><br>1=obesity (≥30.0)<br>2=Overweight (25.0-29.9)<br>3=Normal weight (18.5-24.9)<br>4=Underweight (<18.5) | 10 | How many drugs do you take routinely?<br>.....                                                                             |
| <b>HEALTH SERVICE RELATED</b> |                                                                                                                                                                                                                                |    |                                                                                                                            |
|                               | How far is the nearest health facility from your residence? (kilometers)<br>1= less than 1km<br>2= 1-5km<br>3= 6-10km<br>4= more than 10km                                                                                     |    | Do you have access to physiotherapy services at the nearest health facility?<br>1= Yes<br>2= No                            |
| <b>COMORBITIES</b>            |                                                                                                                                                                                                                                |    |                                                                                                                            |
| 11                            | Do you have a history of any chronic illness? (Diabetes mellitus, hypertension, cardiovascular disease, chronic obstructive pulmonary disease, cancer among others)<br>.....                                                   |    |                                                                                                                            |
| <b>LIFESTYLE FACTORS</b>      |                                                                                                                                                                                                                                |    |                                                                                                                            |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |                                                                                                                              |
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| 12 | Smoking status<br>1=Non smoker<br>2=Ever Smoked<br>3=Current Smoker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 13 | Alcohol consumption<br>1=No alcohol consumption history<br>2=History of alcohol consumption<br>3=Current alcohol consumption |
| 14 | <p><b>MINI NUTRITIONAL ASSESSMENT</b></p> <p>Complete the screen by filling in the boxes with the appropriate numbers. Total the numbers for the final screening score.</p> <p><b>Screening</b></p> <p>A. Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?<br/>0=Severe decrease in food intake<br/>1=Moderate decrease in food intake<br/>2=No decrease in food intake</p> <p>B. Weight loss during the last 3 months<br/>0=Weight loss greater than 3kg<br/>1=Does not know<br/>2=Weight loss between 1 and 3kg<br/>3=no weight loss</p> <p>C. Mobility<br/>0=Bed or chair bound<br/>1=Able to get out of bed / chair but does not go out<br/>2=Goes out</p> <p>D. Has suffered psychological stress or acute disease in the past 3 months?<br/>0=Yes                                  2=No</p> <p>E. Neuropsychological problems<br/>0=Severe dementia or depression<br/>1=Mild dementia<br/>2=No psychological problems</p> <p>F. (i) Body Mass Index (BMI) (<math>\text{kg/m}^2</math>)<br/>0=BMI less than 19<br/>1=BMI 19 to less than 21<br/>2=BMI 21 to less than 23<br/>3=BMI 23 or greater</p> <p style="text-align: center;">If BMI is not Available, replace question F.(i) with F.(ii).<br/>Do not answer F.(ii) if questions F(i) is already completed.</p> <p>F.(ii) Calf circumference (CC) in cm<br/>0=CC less than 31<br/>3=CC 31 or greater</p> |    |                                                                                                                              |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|    | <p><b>Screening Score</b><br/>(max. 14 points)</p> <p>12-14 points: <input type="checkbox"/> normal nutritional status</p> <p>8-11 points: <input type="checkbox"/> At risk of malnutrition <input type="checkbox"/></p> <p>0-7 points: <input type="checkbox"/> Malnourished</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 15 | <p><b>INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (IPAQ)</b></p> <p>We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the last 7 days. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.</p> <p>Think about all the vigorous activities that you did in the last 7 days. Vigorous physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.</p> <p>1. During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, digging, aerobics, or fast bicycling?<br/> ..... days per week<br/> <input type="checkbox"/> No vigorous physical activities &gt;&gt;&gt;skip to question 3</p> <p>2. How much time did you usually spend doing vigorous physical activities on one of those days?<br/> ..... Hours per day<br/> ..... Minutes per day<br/> <input type="checkbox"/> Don't know/ Not Sure</p> <p>Think about all the moderate activities that you did in the last 7 days. Moderate activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.</p> <p>3. During the last 7 days, on how many days did you do moderate physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.<br/> ..... days per week<br/> <input type="checkbox"/> No moderate physical activities &gt;&gt;&gt; skip to question 5</p> |

|                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|----|------------------------------------------------------------|-----|----|-----------------------------------------|-----|----|----------------------------|-----|----|----------------------------------------------|------|----|-----------------------------------------------------------------|-----|----|
|                                                                 | <p>4. How much time did you usually spend doing moderate physical activities on one of those days?<br/> ..... Hours per day<br/> ..... minutes per day<br/> <input type="checkbox"/> Don't know/ not sure</p> <p>Think about the time you spent walking in the last 7 days. This includes at work and at home, walking to travel from place to place, and any other walking that you have done solely for recreation, sport, exercise, or leisure.</p> <p>5. During the last 7 days, on how many days did you walk for at least 10 minutes at a time?<br/> ..... days per week<br/> <input type="checkbox"/> No walking &gt;&gt;&gt; skip to question 7</p> <p>6. How much time did you usually spend walking on one of those days?<br/> ..... Hours per day<br/> ..... minutes per day<br/> <input type="checkbox"/> Don't know/ not sure</p> <p>The last question is about the time you spent sitting on weekdays during the last 7 days. Include time spent at 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.</p> <p>7. During the last 7 days, how much time did you spend sitting on a week day?<br/> ..... Hours per day<br/> ..... minutes per day<br/> <input type="checkbox"/> Don't know/ not sure</p> <p>This is the end of the questionnaire, thank you for participating.</p> |                                                |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
| 16                                                              | <p><b>GERIATRIC DEPRESSION SCALE (short form)</b></p> <p><b>Instructions:</b> Circle the answer that best describes how you felt over the past week</p> <table border="0"> <tr> <td>1. Are you basically satisfied with your life?</td> <td>Yes</td> <td>no</td> </tr> <tr> <td>2. Have you dropped many of your activities and interests?</td> <td>Yes</td> <td>no</td> </tr> <tr> <td>3. Do you feel that your life is empty?</td> <td>Yes</td> <td>no</td> </tr> <tr> <td>4. Do you often get bored?</td> <td>Yes</td> <td>no</td> </tr> <tr> <td>5. Are you in good spirits most of the time?</td> <td>Yes.</td> <td>No</td> </tr> <tr> <td>6. Are you afraid that something bad is going to happen to you?</td> <td>Yes</td> <td>no</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1. Are you basically satisfied with your life? | Yes | no | 2. Have you dropped many of your activities and interests? | Yes | no | 3. Do you feel that your life is empty? | Yes | no | 4. Do you often get bored? | Yes | no | 5. Are you in good spirits most of the time? | Yes. | No | 6. Are you afraid that something bad is going to happen to you? | Yes | no |
| 1. Are you basically satisfied with your life?                  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | no                                             |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
| 2. Have you dropped many of your activities and interests?      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | no                                             |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
| 3. Do you feel that your life is empty?                         | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | no                                             |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
| 4. Do you often get bored?                                      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | no                                             |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
| 5. Are you in good spirits most of the time?                    | Yes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No                                             |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |
| 6. Are you afraid that something bad is going to happen to you? | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | no                                             |     |    |                                                            |     |    |                                         |     |    |                            |     |    |                                              |      |    |                                                                 |     |    |

|                                                                                                             |            |           |
|-------------------------------------------------------------------------------------------------------------|------------|-----------|
| 7. Do you feel happy most of the time?                                                                      | Yes.       | No        |
| 8. Do you feel helpless?                                                                                    | Yes        | no        |
| 9. Do you prefer to stay at home, rather than going out and doing things?                                   | Yes        | no        |
| 10. Do you feel that you have more problems with memory than most?                                          | Yes        | no        |
| 11. Do you think it is wonderful to be alive now?                                                           | Yes        | no        |
| 12. Do you feel worthless the way you are now?                                                              | Yes        | no        |
| 13. Do you feel full of energy?                                                                             | Yes        | no        |
| 14. Do you feel that your situation is hopeless?                                                            | Yes        | no        |
| 15. Do you think that most people are better off than you are?                                              | Yes        | no        |
| <b>Total Score</b> .....                                                                                    |            |           |
| <p><b>Instructions:</b> Score 1 point for each bolded answer. A score of 5 or more suggests depression.</p> |            |           |
| 1. Are you basically satisfied with your life?                                                              | Yes        | <b>no</b> |
| 2. Have you dropped many of your activities and interests?                                                  | <b>Yes</b> | no        |
| 3. Do you feel that your life is empty?                                                                     | <b>Yes</b> | no        |
| 4. Do you often get bored?                                                                                  | <b>Yes</b> | no        |
| 5. Are you in good spirits most of the time?                                                                | Yes        | <b>No</b> |
| 6. Are you afraid that something bad is going to happen to you?                                             | <b>Yes</b> | no        |
| 7. Do you feel happy most of the time?                                                                      | Yes.       | <b>No</b> |
| 8. Do you feel helpless?                                                                                    | <b>Yes</b> | no        |
| 9. Do you prefer to stay at home, rather than going out and doing things?                                   | <b>Yes</b> | no        |

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
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|                                                                   | <p>10. Do you feel that you have more problems with memory than most?      <u>Yes</u>      no</p> <p>11. Do you think it is wonderful to be alive now?      Yes      <u>no</u></p> <p>12. Do you feel worthless the way you are now?      <u>Yes</u>      no</p> <p>13. Do you feel full of energy?      Yes      <u>no</u></p> <p>14. Do you feel that your situation is hopeless?      <u>Yes</u>      no</p> <p>15. Do you think that most people are better off than you are?      <u>Yes</u>      no</p> <p style="text-align: right;"><b>Total Score</b> .....</p> <p>A score of <math>\geq 5</math> suggests depression</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 17                                                                | <p><b>ULCA LONELINESS SCALE (loneliness and social isolation)</b></p> <p><b>Instructions:</b> indicate how often each of the statements below is descriptive of you.<br/> O indicates "I often feel this way"<br/> S indicates "I sometimes feel this way"<br/> R indicates "I rarely feel this way"<br/> N indicates "I never feel this way"</p> <table border="0"> <tr><td>1. I am unhappy doing so many things alone</td><td>O S R N</td></tr> <tr><td>2. I have no body to talk to</td><td>O S R N</td></tr> <tr><td>3. I cannot tolerate being so alone</td><td>O S R N</td></tr> <tr><td>4. I lack companionship</td><td>O S R N</td></tr> <tr><td>5. I feel as if nobody really understands me</td><td>O S R N</td></tr> <tr><td>6. I find myself waiting for people to call or write</td><td>O S R N</td></tr> <tr><td>7. There is no one I can turn to</td><td>O S R N</td></tr> <tr><td>8. I am no longer close to anyone</td><td>O S R N</td></tr> <tr><td>9. My interests and ideas are not shared by those around me</td><td>O S R N</td></tr> <tr><td>10. I feel left out</td><td>O S R N</td></tr> <tr><td>11. I feel completely alone</td><td>O S R N</td></tr> <tr><td>12. I am unable to reach out and communicate with those around me</td><td>O S R N</td></tr> <tr><td>13. My social relationships</td><td>O S R N</td></tr> <tr><td>14. I feel starved for company</td><td>O S R N</td></tr> <tr><td>15. No one really knows me well</td><td>O S R N</td></tr> <tr><td>16. I feel isolated from others</td><td>O S R N</td></tr> <tr><td>17. I am unhappy being so withdrawn</td><td>O S R N</td></tr> <tr><td>18. It is difficult for me to make friends</td><td>O S R N</td></tr> <tr><td>19. I feel shut out and excluded by others</td><td>O S R N</td></tr> <tr><td>20. People are around me but not with me</td><td>O S R N</td></tr> </table> <p><b>Scoring:</b>      <b>Total:</b> <input type="text"/></p> <p>make all O's =3, all S's =2, all R's =1, all N's =0. Keep scoring continuous.</p> <p><b>Loneliness scale:</b> Low ( 20-29), Moderate (30-50), High (50-80)</p> | 1. I am unhappy doing so many things alone | O S R N | 2. I have no body to talk to | O S R N | 3. I cannot tolerate being so alone | O S R N | 4. I lack companionship | O S R N | 5. I feel as if nobody really understands me | O S R N | 6. I find myself waiting for people to call or write | O S R N | 7. There is no one I can turn to | O S R N | 8. I am no longer close to anyone | O S R N | 9. My interests and ideas are not shared by those around me | O S R N | 10. I feel left out | O S R N | 11. I feel completely alone | O S R N | 12. I am unable to reach out and communicate with those around me | O S R N | 13. My social relationships | O S R N | 14. I feel starved for company | O S R N | 15. No one really knows me well | O S R N | 16. I feel isolated from others | O S R N | 17. I am unhappy being so withdrawn | O S R N | 18. It is difficult for me to make friends | O S R N | 19. I feel shut out and excluded by others | O S R N | 20. People are around me but not with me | O S R N |
| 1. I am unhappy doing so many things alone                        | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 2. I have no body to talk to                                      | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 3. I cannot tolerate being so alone                               | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 4. I lack companionship                                           | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 5. I feel as if nobody really understands me                      | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 6. I find myself waiting for people to call or write              | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 7. There is no one I can turn to                                  | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 8. I am no longer close to anyone                                 | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 9. My interests and ideas are not shared by those around me       | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 10. I feel left out                                               | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 11. I feel completely alone                                       | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 12. I am unable to reach out and communicate with those around me | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 13. My social relationships                                       | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 14. I feel starved for company                                    | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 15. No one really knows me well                                   | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 16. I feel isolated from others                                   | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 17. I am unhappy being so withdrawn                               | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 18. It is difficult for me to make friends                        | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 19. I feel shut out and excluded by others                        | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |
| 20. People are around me but not with me                          | O S R N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |         |                              |         |                                     |         |                         |         |                                              |         |                                                      |         |                                  |         |                                   |         |                                                             |         |                     |         |                             |         |                                                                   |         |                             |         |                                |         |                                 |         |                                 |         |                                     |         |                                            |         |                                            |         |                                          |         |

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|----|-------------------------------------------------------------------------------------------------------------------|
| 18 | <b>DIAGNOSTIC CRITERIA FOR SARCOPENIA</b><br>Gait speed .....<br><br>Grip strength .....<br><br>Muscle mass ..... |
|----|-------------------------------------------------------------------------------------------------------------------|

