Supplementary File 1. Examples of campaign materials

Campaign theme "Exercise regularly"
English translation: "Reduces walking the risk of dementia?"

Campaign theme "Eat healthy"
English translation: "Reduces strawberries the risk of dementia?"

Campaign theme "Stay curious"
English translation: "Reduces playing guitar the risk of dementia?"

Supplementary File 2: The MijnBreincoach eHealth platform

The MijnBreincoach eHealth platform uses the LIBRA score to give people insight into their own dementia risk profile and flags individual room for lifestyle improvement. The LIBRA index consists of 12 modifiable risk and protective factors for dementia. Users start with a 12-item "quick test" that assesses the LIBRA factors and flags personal room for improvement based on self-reported data on the presence and/or absence of the specific LIBRA factor. Next, a user can create an account and complete the more comprehensive administration that assesses the 12 LIBRA factors with follow-up questions on the "quick test" by validated questionnaires. People can get insight and feedback on their personal risk profile, identify areas of healthy behaviour (to facilitate maintenance), areas of unhealthy behaviour (to facilitate change), and identify chronic vascular/metabolic conditions (to facilitate appropriate management). A user can choose a lifestyle topic or health condition of interest (smoking, alcohol use, cognitive activity, healthy diet, physical activity, obesity, hypertension, diabetes, coronary heart disease, chronic kidney disease, depression, or hypercholesterolaemia) and receives daily notifications ("nut of the day") on how to improve brain health by means of that factor.

Personal profile with room for improvement

"Nut of the day"

Short text message containing a recipe

Supplementary File 3 - Dementia awareness questionnaire

Pre- and post-assessment:

Demographics

1. How old are you?
   [text field for number between 40 and 75]

2. What is your gender?
   - Male
   - Female

3. What is your zip code?
   [text field of four numbers]

4. What is your marital status?
   - Married/registered partnership
   - Living together
   - Unmarried, never been married
   - Divorced
   - Widowed

5. What is your highest finalized degree of education?
   [Six categories according to the Dutch education system, categorized into low, medium and high]

Dementia knowledge

1. Dementia describes a set of symptoms including loss of memory, sudden mood swings, not remembering who people are, and having trouble finding your words. Alzheimer's disease is one form of dementia. How much would you say you know about dementia?
   - A great deal
   - Quite a lot
   - Some
   - Not very much
   - Nothing at all
   - I don't know
   - I prefer not to answer this question

Dementia risk awareness

Pl*ease state how much you agree or disagree with the following statements.*

1. 'There is nothing anyone can do to reduce their risks of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

2. 'High blood pressure increases your chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

3. 'Smoking increases your chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

4. 'No or moderate alcohol use lowers your chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

5. Regular physical activity lowers your chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

6. 'Depression increases the chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

7. 'Diabetes increases the chances of getting dementia'
    - Agree strongly
    - Agree

- Neither agree nor disagree
- Disagree
- Disagree strongly

8. 'Being overweight increases the chances of getting dementia'
   - Agree strongly
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Disagree strongly

9. 'A mentally active lifestyle lowers the chances of getting dementia'
   - Agree strongly
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Disagree strongly

10. 'Heart disease increases the chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

11. 'Kidney disease increases the chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

12. 'High cholesterol increases the chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

13. 'Healthy diet lowers the chances of getting dementia'
    - Agree strongly
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Disagree strongly

14. Would you be interested in receiving information on how to improve your brain health?
    - Yes
    - No

- Maybe

15. In the case that there was a mobile application, providing you without charge with information about your brain health en giving advice on how to improve your brain health, would you use this app?
    - Yes
    - No
    - Maybe

[*If answer is No, go to End*]

[*If answer is Yes or Maybe, go the question 16*]

16. Maastricht University has started a research line focused on prevention of dementia, in collaboration with the municipal health services. This research includes the development of an app (mobile application) that could give you more insight into your own brain health and how to improve your brain health. Would you be interested and do you give consent to be contacted for this research?
    - Yes, I give consent
    - No, I give no consent

[*If answer is No, go to End*]
[*If answer is Yes, go to question 17*]

17. Please leave the phone number and/or e-mail-address that we can use to contact you for this research. [*Text field*]

Extra items post-assessment:

Exposure to the campaign

1. From March 2018 until January 2019, the Alzheimer Center Limburg ran a campaign focused on dementia prevention. Have you heard about this campaign?
    - No
    - Yes

2. Do you recognize the slogan “We are our own medicine”?
    - No
    - Yes

3. Have you heard about the MijnBreincoach (*MyBraincoach*) app? [*illustrative screenshot of the app*]
    - No
    - Yes

4. Via what sources have you heard or seen something about prevention of dementia during the last year? Select all that apply.
    - Television
    - Radio
    - Newspaper
    - Advertisement on bus shelter

- Website of this campaign
- Social media
- Campaign activity, such as a workshop or presentation
- I have not heard or seen something of this kind during the last year
- Other source [*open text field*]

5. Have you seen these campaign materials during the last year? [*illustrative screenshots*]
   - Campaign flyer [yes/no]
   - Campaign poster [yes/no]
   - Bus shelter advertisement [yes/no]
   - Vaccine boxes [yes/no]

6. Have you adopted a more healthy lifestyle during the last year? If yes, what specific changes have you made? Select all that apply.
   - I have not adopted a more healthy lifestyle during the last year
   - Eat more healthy
   - Exercise more
   - Consume less alcohol or stop drinking alcohol
   - Smoke less or stop smoking cigarettes
   - Be mentally more active
   - More relaxation or more adequate coping for depressive complaints
   - Monitor my glucose levels
   - Monitor my weight
   - Lowering my blood pressure
   - Monitor my kidney function
   - Monitor my heart condition
   - Other: [*open text field*]

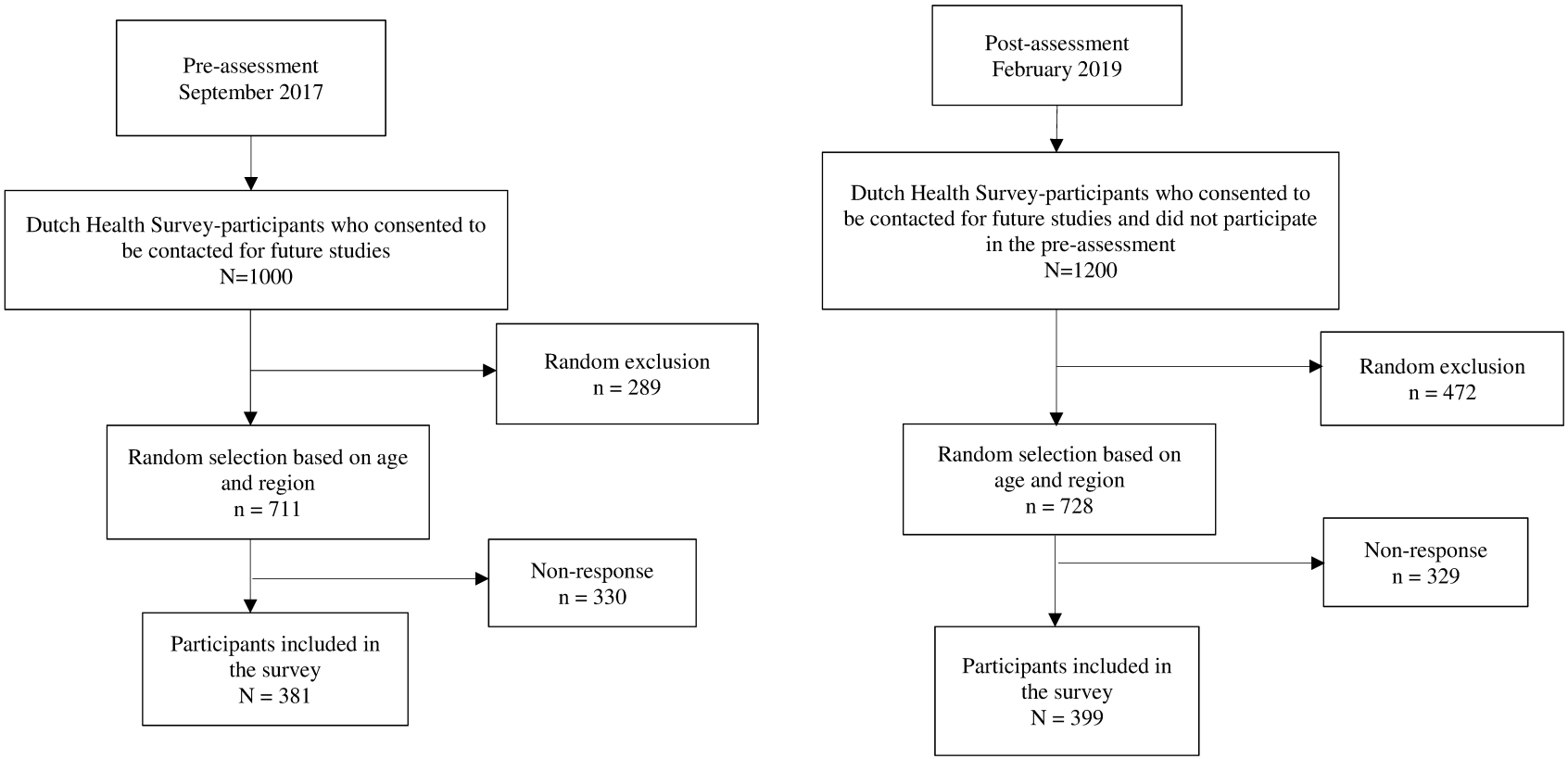
7. Did you adopt a more healthy lifestyle during the last year in order to improve your brain health?
   - No
   - Yes

8. Would you say that you have become more conscious of your brain health and the relationship of your brain health with your lifestyle over the last year?
   - No
   - Yes

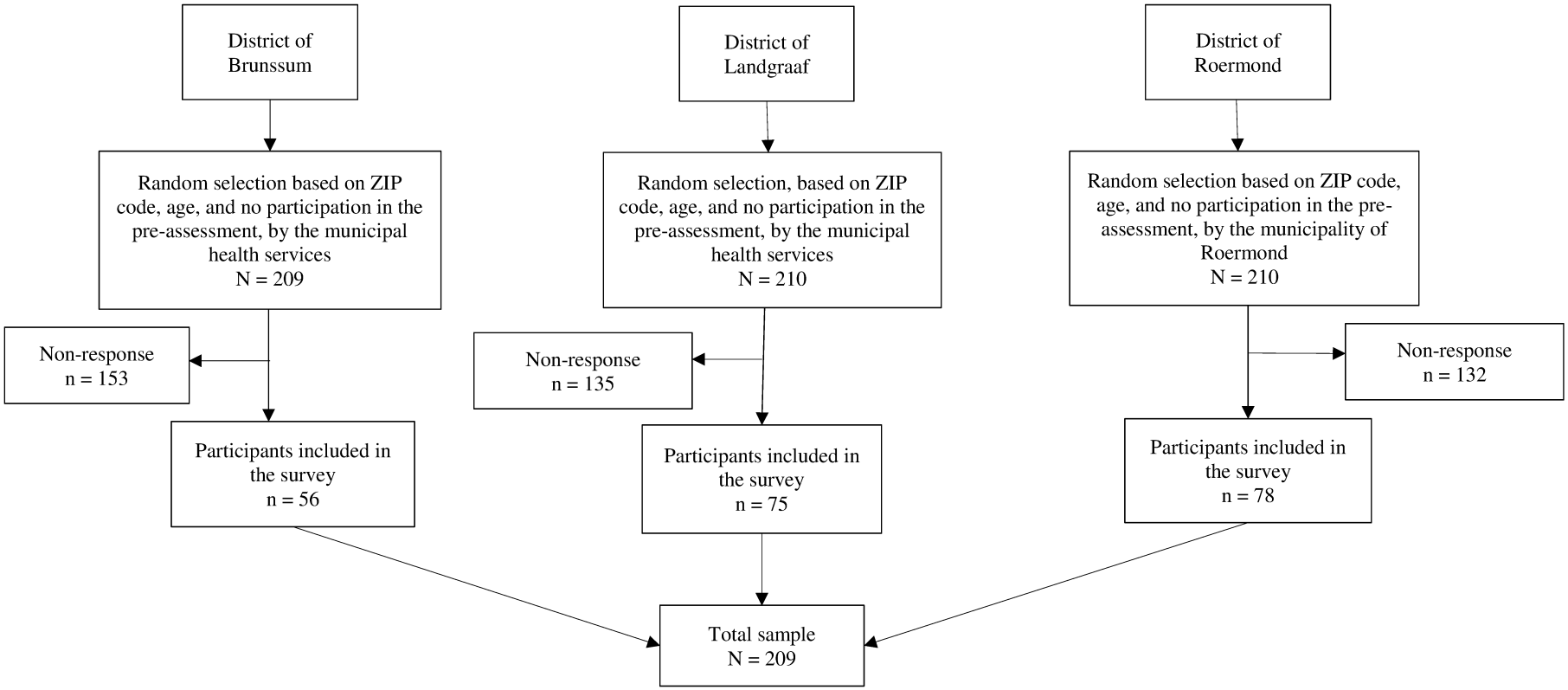
End

Thank you very much for filling in this questionnaire. If you have any remarks or questions regarding this study, please contact us via [*email address*].

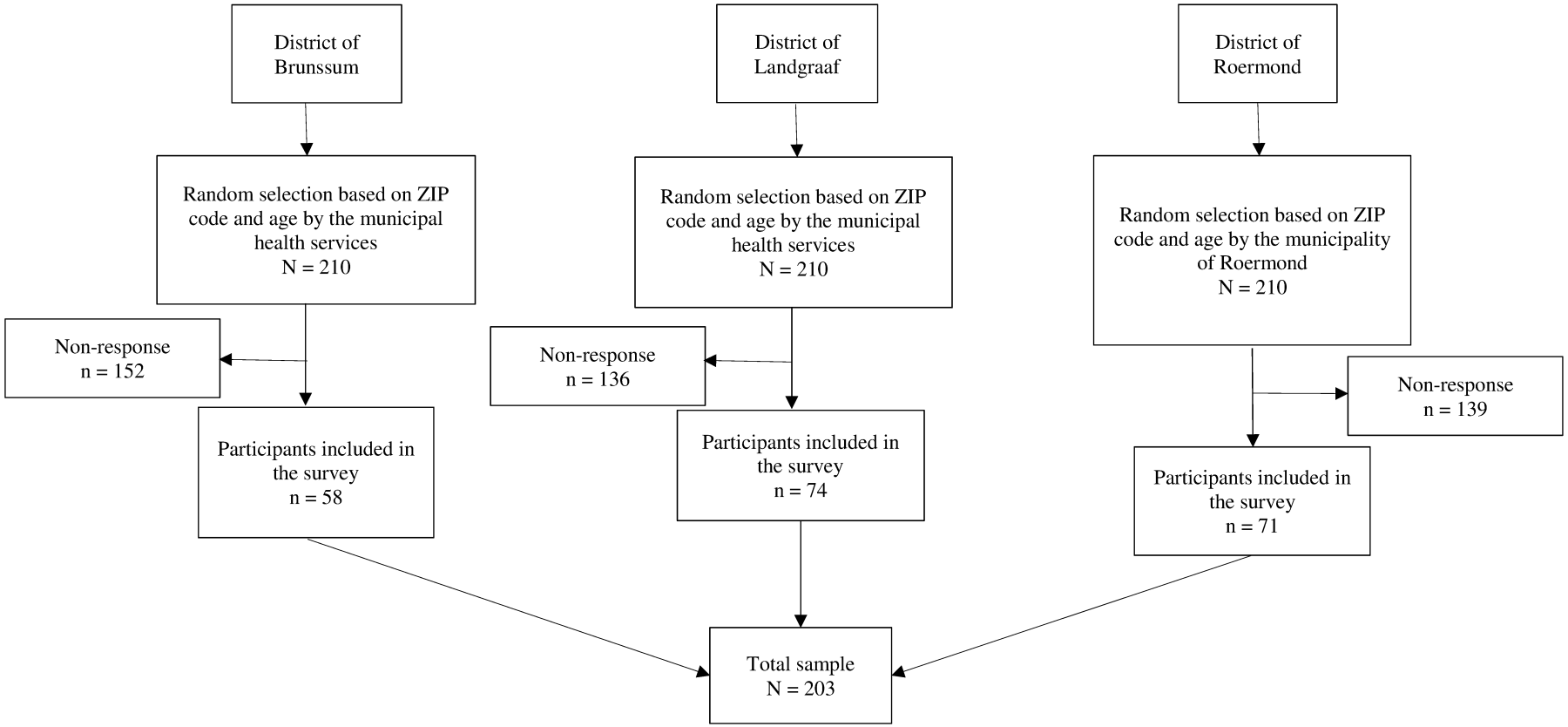
Supplementary File 4. Flowchart of the population pre- and post-assessment



Supplementary File 5a. Flowchart of the district pre-assessment



Supplementary File 5b. Flowchart of the district post-assessment



Supplementary File 6. Characteristics of the three districts before and after the campaign

	District of Roermond (n = 149)			District of Landgraaf (n = 149)			District of Brunssum (n = 114)		
Variables*	**Pre-campaign (n=78)**	**Post-campaign (n=71)**	**p-value**	**Pre-campaign (n=75)**	**Post-campaign (n=74)**	**p-value**	**Pre-campaign (n=56)**	**Post-campaign (n=58)**	**p-value**
Age, mean (SD)	56.9 (8.7)	55.4 (7.1)	0.247	60.9 (7.7)	59.1 (8.6)	0.177	63.3 (8.1)	57.7 (8.8)	< 0.001
Age group (year), *n* (%)			0.222			0.241			0.013
40 – 49	19 (24.4%)	17 (23.9%)		4 (5.6%)	12 (16.2%)		4 (7.3%)	10 (17.2%)	
50 – 59	30 (38.5%)	29 (40.9%)		25 (35.2%)	22 (29.7%)		14 (25.5%)	26 (44.8%)	
60 – 69	22 (28.2%)	24 (33.8%)		33 (46.5%)	31 (41.9%)		24 (43.6%)	17 (29.3%)	
70 – 75	7 (9.0%)	1 (1.4%)		9 (12.7%)	9 (12.2%)		13 (23.6%)	5 (8.6%)	
Female, *n* (%)	39 (50.0%)	41 (57.8%)	0.344	38 (50.7%)	37 (50.0%)	0.935	28 (50.0%)	31 (53.5%)	0.713
Marital status, *n* (%)			0.144			0.875			0.972
Married/living together	66 (84.6%)	49 (69.0%)		64 (85.3%)	64 (86.5%)		42 (75.0%)	44 (75.9%)	
Not/never been married	4 (5.1%)	7 (9.9%)		4 (5.3%)	4 (5.4%)		4 (7.1%)	5 (8.6%)	
Divorced	5 (6.4%)	11 (15.5%)		5 (6.7%)	3 (4.1%)		5 (8.9%)	4 (6.9%)	
Widowed	3 (3.9%)	4 (5.6%)		2 (2.7%)	3 (4.1%)		5 (8.9%)	5 (8.6%)	
Educational level†, *n* (%)			0.725			0.996			0.985
Low	18 (23.1%)	13 (18.3%)		15 (20.0%)	15 (20.3%)		22 (39.3%)	22 (37.9%)	

Middle	32 (41.0%)	29 (40.9%)		33 (44.0%)	32 (43.2%)	23 (41.1%)	24 (41.4%)	
High	28 (35.9%)	29 (40.9%)		27 (36.0%)	27 (36.5%)	11 (19.6%)	12 (20.7%)	
Self-reported knowledge of dementia, *n* (%)			0.186					0.634
Good	72 (92.3%)	59 (85.5%)		65 (86.7%)	66 (90.4%)	44 (78.6%)	46 (82.1%)	
Insufficient	6 (7.7%)	10 (14.5%)		10 (13.3%)	7 (9.6%)	12 (21.4%)	10 (17.9%)	

Abbreviations: SD: standard deviation; n: amount of people; * Maximum value does not count up due to missing values; † Self-reported highest finalized degree, divided into low (primary school or low vocational education), middle (intermediate secondary education or intermediate vocational or higher secondary education) and high (higher vocational education or university).