## Additional file 1

## **Original questionnaire items**

A non-validated translation to English of the original questionnaire items in the Health and Social Support (HeSSup) survey. Total number of items in the survey was 103 in 2003 (112 in 2011) of which 12 were used for the manuscript and are presented here. Placement in the survey in 2003 is indicated by the item number before every question and in parenthesis for the year 2011. References are given where translations are obtained from previous publications. The question regarding physical exercise is not an exact translation but corresponds more to the tone by which this topic would be inquired in an English speaking population. Information about birth year was derived from the official personal identification code.

2 (2) What is your vocational educatio	n (choose one) [1]	
No professional training	Vocational school	Degree from university
Vocational course (minimum length 4	College	
months)		
Apprenticeship contract	Polytechnic	

28 (28) During the past year, how much time in a week did you spend on physical activity in leisure time or while commuting? How intense has the physical activity been? (adapted from: 2,3)

	Amount of time spent on physical activity in a week						
Intensity of physical activity (answer each section below)	Not at all	Less than 0.5 hour	One hour	2–3 hours	4 hours or more		
Comparable to walking							
Comparable to brisk walking							
Comparable to jogging							
Comparable to running							

## 32 (31) How often have you consumed the following food items? [4]

	2 times a day or more often	Once a day	On 3–6 days a week	On 4–10 days a month	On 1–2 days a month	Rarely	Never
Rye bread <sup>a</sup>							
White bread							
Brown bread							
Pastry or							
bisquits <sup>a</sup>							
Potato chips							
or equivalent							
Sweets <sup>a</sup>							
Fresh fruit <sup>a</sup>							
Fresh							
vegetables <sup>a</sup>							
Berries <sup>a</sup>							

Mushrooms Cheese Fat free milk <sup>a</sup> Other milk Soured-milk products						
Tea Sausages <sup>a</sup> Beef <sup>a</sup> Pork <sup>a</sup> Chicken or turkey <sup>a</sup>						
Lamb <sup>a</sup> Salmon, rainbow trout or tuna <sup>a</sup> Other fish <sup>a</sup> Eggs						
<sup>a</sup> Items used in the diet score. [4]						

54 (54) Has a doctor ever said, that you have or had had any of the following conditions (Indicate even, if your answer is no):

	No	Yes
Long-term bronchitis or bronchiectasis		
Lung asthma		
Allergic rhinitis e.g. hay fever		
High blood pressure		
Hypertension		
High cholesterol		
Diabetes		
Myocardial infarction or coronary thrombosis		
Angina pectoris, i.e. chest pain caused by coronary artery disease		
Atrial fibrillation or atrial flutter		
Stroke		
Other cerebrovascular accident		
Peptic ulcer		
Celiac disease		
Liver disease		
Kidney disease		
Rheumatoid arthritis		
Arthrosis		
Sciatica		
Fibromyalgia		
Cataract or glaucoma		
Migraine		
Epilepsy		
Brain injury		
Meningitis or encephalitis		
Other cerebral disease of neurological disease		
Depression		
Panic disorder		
Eating disorder		
Other mental disorder		
Malignant tumor		
Other chronic or severe disease, which?		

72 (72) How many cigarettes on average do you currently smoke daily? [1]

□ 15–19 cigarettes

□ 20–24 cigarettes

□ None
 □ Less than 5 cigarettes
 □ 5–9 cigarettes
 □ 10–14 cigarettes

ettes25-40 cigarettesgarettes $\Box$  over 40 cigarettes

How much do you drink the following alcoholic beverages on average? [5]  $\Box$  13–24 bottles 78 (80) Beer IN A WEEK  $\Box$  Not at all  $\Box$  Less than one bottle (0.331)  $\square$  25–47 bottles  $\Box$  1–4 bottles Over 48 bottles  $\Box$  5–12 bottler 79 (81) Wine or other equivalent  $\Box$  Not at all  $\Box$  3–4.5 bottles mild alcoholic beverages  $\Box$  Less than a glass  $\Box$  5–9 bottles IN A WEEK  $\Box$  1–4 glasses Over 10 bottles  $\Box$  1–2.5 bottles 80 (83) Spirits IN A MONTH □ Not at all  $\Box$  4–9 bottles  $\Box$  Less than half a bottle (0.51)  $\Box$  10–19 bottles  $\Box$  0.5–1.5 bottles  $\Box$  Over 20 bottles  $\square$  2–3.5 bottles

98 (102) Do you feel that your life at present is [6]
Very interesting
Fairly interesting
Cannot say
Fairly boring
Very boring

99 (103) Do you feel that your life at present is [6]
Very happy
Fairly Happy
Cannot say
Fairly unhappy
Very unhappy

100 (104) Do you feel that your life at present is [6]
Very easy
Fairly easy
Cannot say
Fairly hard
Very hard

101 (105) Do you feel that at the present moment you are [6]
Very lonely
Fairly lonely
Not at all lonely
Cannot say

Note that as in earlier publications [6] the item of loneliness is a four level item but was stretched over a scale of 1–5 excluding value 2 to have the same range as the other responses. In addition, the item was reversed having the same direction of positive outcome i.e. not being lonely as the other items.

References:

1. Paljärvi T. Subjective measures of binge drinking and adverse health outcomes. University of Helsinki; 2014.

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4. Lagström H, Halonen JI, Kawachi I, Stenholm S, Pentti J, Suominen S, et al. Neighborhood socioeconomic status and adherence to dietary recommendations among Finnish adults: A retrospective follow-up study. Heal Place. 2019;55:43–50.

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6. Koivumaa-Honkanen H, Honkanen R, Viinamäki H, Heikkilä K, Kaprio J, Koskenvuo M. Self-reported Life Satisfaction and 20-Year Mortality in Healthy Finnish Adults. 2000.