

## APPENDIX

Table A. Factors associated with occupational position at phase 7

	Occupational position			P-value*
	High (n=2104)	Middle (n=1745)	Low (n=301)	
<b>Covariates</b>				
Sex, female, %	14.3	32.3	72.8	<10 <sup>-4</sup>
Age in years, mean (SD)	60.7 (5.8)	60.3 (6.0)	62.8 (5.9)	<10 <sup>-4</sup>
Marital status, married or cohabited, %	85.0	71.1	51.8	<10 <sup>-4</sup>
Education, no academic qualification, %	1.3	9.7	46.5	<10 <sup>-4</sup>
Smoking habits, Current smokers, %	8.3	13.1	16.9	<10 <sup>-4</sup>
Alcohol consumption, > one drink per day, %	59.2	41.8	20.3	<10 <sup>-4</sup>
Physical activity, low, %	13.0	14.6	26.9	<10 <sup>-4</sup>
CHD prevalence, %	6.1	6.0	7.6	0.55
Depressive symptoms, %	9.2	12.7	14.6	0.004
<b>Metabolic syndrome over 10-year</b>				
Persistent metabolic syndrome, %	6.6	8.1	12.3	0.01
Non persistent metabolic syndrome, %	10.1	10.1	10.0	
<b>Cognitive T-scores</b>				
Memory, mean (SD)	51.2 (9.8)	49.3 (10.0)	45.2 (9.8)	<10 <sup>-4</sup>
Reasoning, mean (SD)	53.7 (8.2)	47.9 (9.1)	36.0 (10.3)	<10 <sup>-4</sup>
Vocabulary, mean (SD)	53.5 (7.8)	48.1 (9.3)	36.4 (12.7)	<10 <sup>-4</sup>
Phonemic fluency, mean (SD)	52.3 (9.8)	48.5 (9.3)	42.3 (9.9)	<10 <sup>-4</sup>
Semantic fluency, mean (SD)	52.4 (9.6)	48.7 (9.3)	40.9 (10.2)	<10 <sup>-4</sup>
MMSE, mean (SD)	50.8 (9.2)	50.0 (10.0)	44.2 (13.0)	<10 <sup>-4</sup>

\* A chi-square test for heterogeneity (for categorical variables) and ANCOVA (for continuous variables) was used.

Table B. Association between the cumulative exposure to the metabolic syndrome over the 10-year follow-up and cognitive performances at phase 7.

	Mean differences of cognitive T-score across cumulative exposure to the metabolic syndrome													
	Fully adjusted * model with education						Fully adjusted * model with occupational position							
	Never	Non persistent			Persistent		Never	Non persistent			Persistent			
	$\delta m$	95 % CI	p	$\delta m$	95 % CI	p		$\delta m$	95 % CI	p	$\delta m$	95 % CI	p	
Memory	ref	-0.17	-1.13; 0.80	0.74	-0.92	-2.01; 0.18	0.10	ref	-0.19	-1.16; 0.78	0.70	-0.58	-1.67; 0.52	0.30
Reasoning	ref	-0.09	-0.96; 0.78	0.84	-0.78	-1.77; 0.20	0.12	ref	-0.23	-1.10; 0.63	0.60	-0.007	-1.00; 0.98	0.99
Vocabulary	ref	-0.34	-1.21; 0.53	0.44	-1.89	-2.87; -0.90	0.0002	ref	-0.46	-1.35; 0.44	0.32	-1.08	-2.09; 0.06	0.04
Phonemic fluency	ref	-0.34	-1.30; 0.62	0.49	-0.75	-1.84; 0.34	0.18	ref	-0.43	-1.39; 0.52	0.37	-0.24	-1.32; 0.84	0.66
Semantic fluency	ref	-0.24	-1.18; 0.70	0.62	-1.30	-2.37; -0.24	0.02	ref	-0.32	-1.25; 0.62	0.51	-0.77	-1.83; 0.30	0.16
MMSE	ref	-0.53	-1.53; 0.47	0.30	-0.67	-1.80; 0.46	0.25	ref	-0.62	-1.62; 0.37	0.22	-0.36	-1.49; 0.77	0.53

$\delta m$  –Mean differences of cognitive T-score with their 95% Confidence intervals across the cumulative exposure to the metabolic syndrome compared to the reference group

\* model adjusted for demographics (age, sex marital status) behavioural health factors (smoking status, alcohol consumption, physical activity) and health status (CHD prevalence and depressive symptoms)