

Web Table 1. Numbers (%) of Those Who Died, Were Alive but did not Participate and Those Who Participated in the AGES-Reykjavik Study by Mid-life BMI Category Measured in the Reykjavik Study

	Mid-life Body Mass Index (BMI, kg/m²)		
	<25	25 to 30	>30
Died before 2002	3515 (37.8)	2715 (40.9)	1305 (44.8)
Alive but did not participate in the AGES Study	2681 (28.9)	2007 (30.2)	908 (31.2)
Alive and participated in the AGES Study	3095 (33.3)	1916 (28.9)	701 (24.1)

Web Table 2. Associations of Overweight and Obesity in Midlife (1967-1987) Body Mass Index (kg/m²) with MRI Measures of Brain Structure and Vascular Damage in Late-life (2002-2006) in the AGES-Reykjavik Study (n=3,864). Comparisons Between Unweighted and Weighted Models Using IPCW. All Models are Fully Adjusted for Sex, Age in Midlife, Follow-up Years and Intracranial Volume; APOE ε4 allele (y/n), Educational Level, Physical Activity Level, Systolic and Diastolic Blood Pressure and Serum Cholesterol Level in Mid-life; and for Coronary Calcium, Prevalent Coronary Heart Disease, Hypertension, Diabetes and Depression; Drinking and Smoking Habits in Late-life. % TBV is Further Adjusted for Brain Infarcts, and Dementia also for % WMLV.

Body Mass Index	% TBV	% WMLV	Brain infarcts	Brain microbleeds	Dementia
	β* [95% CI]	β* [95% CI]	RR† [95% CI]	RR† [95% CI]	RR† [95% CI]
Main models					
Normal weight (reference)	1	1	1	1	1
Overweight	0.10 (-0.12, 0.32)	-0.07 (-0.13, -0.01)	1.08 (0.92, 1.27)	0.91 (0.67, 1.25)	1.22 (0.92, 1.63)
Obese	0.05 (-0.34, 0.45)	-0.10 (-0.20, 0.00)	0.82 (0.61, 1.10)	0.69 (0.37, 1.32)	0.91 (0.49, 1.72)
Weighted models (IPCW)					
Normal weight (reference)	1	1	1	1	1
Overweight	0.08 (-0.15, 0.31)	-0.06 (-0.12, 0.00)	1.10 (0.92, 1.30)	0.90 (0.64, 1.24)	1.24 (0.91, 1.69)
Obese	0.08 (-0.34, 0.50)	-0.10 (-0.20, 0.00)	0.81 (0.59, 1.11)	0.70 (0.36, 1.33)	1.06 (0.56, 2.03)

Abbreviations: BMI , body mass index (normal weight: 18.5≤BMI<25; overweight: 25≤BMI<30; obese: BMI≥30 kg/m²); % TBV , total brain volume (relative to intracranial volume); % WMLV , white matter lesions volume (relative to intracranial volume); RR , relative risks; CI , confidence intervals; SE , standard error; IPCW, inverse-probability censoring weights.

* Beta coefficients from fully adjusted linear regression models of brain volumes adjusted for intracranial volume.

† Relative risks representing the risk of brain infarcts (two or more) (y/n), microbleeds (two or more) (y/n), and dementia from Poisson models with robust 95% confidence intervals.