By cognitive function and gender         Men         Normal cognitive function $14,251$ $1.21 (0.03)$ $[1.15, 1.27]$ Cognitive impairment, without $3,149$ $0.45 (0.09)$ $[0.28, 0.63]$ dementia       649 $-0.28 (0.22)$ $[-0.70, 0.15]$ Women       Women       1000000000000000000000000000000000000			Difference in weight	t (kg)	
N         (Standard Error of Mean)         Confidence Interval           By cognitive function and gender         Men         1.21 (0.03)         [1.15, 1.27]           Normal cognitive function         14,251         1.21 (0.03)         [1.15, 1.27]           Cognitive impairment, without         3,149         0.45 (0.09)         [0.28, 0.63]           dementia         649         -0.28 (0.22)         [-0.70, 0.15]           Women         Normal cognitive function         19,323         1.65 (0.03)         [1.59, 1.70]           Cognitive impairment, without         4,056         1.17 (0.07)         [1.03, 1.31]         dementia           With dementia         890         0.82 (0.20)         [0.44, 1.21]         By BMI category and gender           Men         BMI $\leq$ 24.9         4,434         0.44 (0.07)         [0.30, 0.58]         25 < BMI $\leq$ 29.9         8,124         1.08 (0.04)         [1.00, 1.15]         30 < BMI $\leq$ 34.9         4,058         1.46 (0.06)         [1.33, 1.58] $=$		Measured weight - reported weight			
By cognitive function and gender         Men         Normal cognitive function $14,251$ $1.21 (0.03)$ $[1.15, 1.27]$ Cognitive impairment, without $3,149$ $0.45 (0.09)$ $[0.28, 0.63]$ dementia       649 $-0.28 (0.22)$ $[-0.70, 0.15]$ Women       0       19,323 $1.65 (0.03)$ $[1.59, 1.70]$ Normal cognitive function $19,323$ $1.65 (0.03)$ $[1.59, 1.70]$ Cognitive impairment, without $4,056$ $1.17 (0.07)$ $[1.03, 1.31]$ dementia       890 $0.82 (0.20)$ $[0.44, 1.21]$ By BMI category and gender       Men       10.30, 0.58] $25 < BMI \le 29.9$ $8,124$ $1.08 (0.04)$ $[1.00, 1.15]$ $30 < BMI \le 34.9$ $4,058$ $1.46 (0.06)$ $[1.33, 1.58]$			Mean	95%	
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Cognitive impairment, without $4,056$ $1.17 (0.07)$ $[1.03, 1.31]$ dementia890 $0.82 (0.20)$ $[0.44, 1.21]$ With dementia890 $0.82 (0.20)$ $[0.44, 1.21]$ By BMI category and gender900 $0.82 (0.20)$ $[0.44, 1.21]$ BMI $\leq 24.9$ $4,434$ $0.44 (0.07)$ $[0.30, 0.58]$ $25 < BMI \leq 29.9$ $8,124$ $1.08 (0.04)$ $[1.00, 1.15]$ $30 < BMI \leq 34.9$ $4,058$ $1.46 (0.06)$ $[1.33, 1.58]$	Women				
dementia890 $0.82 (0.20)$ $[0.44, 1.21]$ By BMI category and genderVentorsMenImage: Second Se	Normal cognitive function	19,323	1.65 (0.03)	[1.59, 1.70]	
With dementia890 $0.82 (0.20)$ $[0.44, 1.21]$ By BMI category and genderImage: Second Seco	Cognitive impairment, without	4,056	1.17 (0.07)	[1.03, 1.31]	
By BMI category and genderMen $BMI \le 24.9$ 4,4340.44 (0.07)[0.30, 0.58] $25 < BMI \le 29.9$ 8,1241.08 (0.04)[1.00, 1.15] $30 < BMI \le 34.9$ 4,0581.46 (0.06)[1.33, 1.58]	dementia				
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BMI $\leq 24.9$ 4,4340.44 (0.07)[0.30, 0.58] $25 < BMI \leq 29.9$ 8,1241.08 (0.04)[1.00, 1.15] $30 < BMI \leq 34.9$ 4,0581.46 (0.06)[1.33, 1.58]	By BMI category and gender				
$25 < BMI \le 29.9$ $8,124$ $1.08 (0.04)$ $[1.00, 1.15]$ $30 < BMI \le 34.9$ $4,058$ $1.46 (0.06)$ $[1.33, 1.58]$	Men				
$30 < BMI \le 34.9$ 4,058 1.46 (0.06) [1.33, 1.58]	$BMI \leq 24.9$	4,434	0.44 (0.07)	[0.30, 0.58]	
	$25 < BMI \leq 29.9$	8,124	1.08 (0.04)	[1.00, 1.15]	
BMI $\ge$ 35 1,433 1.31 (0.15) [1.02, 1.60]	$30 < BMI \le 34.9$	4,058	1.46 (0.06)	[1.33, 1.58]	
	$BMI \ge 35$	1,433	1.31 (0.15)	[1.02, 1.60]	

## Table S1. Measured and Reported Weight in Health and Retirement Study, 2006/08-2014/16

## Women

$BMI \leq 24.9$	7,871	1.09 (0.04)	[1.02, 1.17]
$25 < BMI \leq 29.9$	7,883	1.63 (0.04)	[1.55, 1.70]
$30 < BMI \leq 34.9$	5,022	1.99 (0.06)	[1.88, 2.11]
$BMI \geq 35$	3,493	1.68 (0.09)	[1.49, 1.86]