**Supplemental Table S1.** Dietary intake of food groups and physical activity at baseline and at five-year follow-up, NutriNet-Santé cohort.

	Baseline data	Follow-up data	
	% or mean ±SD	% or mean ±SD	<i>p</i> -value
Food group consumption, g/d			
Fruits and vegetables	$547.1 \pm 255.0$	$542.1 \pm 252.5$	< 0.0001
Meat and processed meat	$78.0 \pm 56.6$	$73.8\pm54.8$	0.0002
Fish	$47.0\pm47.8$	$41.4\pm45.8$	< 0.0001
Starchy foods	$193.4 \pm 110.9$	$184.4\pm102.0$	< 0.0001
Whole grain products	$37.8 \pm 52.8$	$38.9\pm52.0$	0.19
Cheese	$39.9 \pm 31.6$	$40.0\pm30.8$	0.0009
Milk and yogurts	$176.4 \pm 161.3$	$157.3 \pm 151.6$	< 0.0001
Salted snacks, appetizers and sauces	$23.6 \pm 22.6$	$25.1 \pm 22.6$	0.01
Oil	$9.8 \pm 9.9$	$9.9 \pm 9.9$	0.87
Butter and other added fats	$13.8 \pm 13.4$	$14.5\pm13.5$	0.85
Fatty-sweet products	$104.2\pm85.6$	$99.1 \pm 81.2$	0.002
Sugar and sugary products	$27.3 \pm 27.1$	$27.7 \pm 26.6$	0.17
Sweetened soft drinks	$71.1 \pm 167.3$	$66.2 \pm 155.4$	< 0.0001
Alcoholic beverages	$116.6 \pm 168.5$	$113.8 \pm 154.1$	< 0.0001
Energy, kcal/d	$1990.7 \pm 517.3$	$1963.1 \pm 486.9$	< 0.0001
Physical activity, %			0.0002
Low	22.9	21.4	
Moderate	42.1	41.7	
High	35.0	36.9	

Baseline data n = 8014, five-year follow-up data n = 4103 for dietary intake, and n = 7732 for physical activity.

*p*-values are for comparison between baseline and five-year follow-up data and were determined using paired Student's *t*-test or Bowker's test of symmetry, as appropriate.

		Educational	Income per consumption	Smoking	Physical	Dieting to	Liking for	Liking for fat-and-	Cognitive	Emotional	Uncontrolled
	Age	level	unit	status	activity	0	fat-and-salt	sweet	restraint	eating	eating
Age	1					0					
Educational level	-0.26090	1									
	< 0.0001										
Income per	0.22735	0.30722	1								
consumption unit	< 0.0001	< 0.0001									
Smoking status	0.10207	-0.06315	0.00148	1							
	< 0.0001	< 0.0001	0.8946								
Physical activity	0.22217	-0.10409	0.00985	0.01053	1						
	< 0.0001	< 0.0001	0.3779	0.3459							
Dieting to lose	-0.01483	-0.04317	-0.00740	0.05433	-0.03445	1					
weight	0.1845	0.0001	0.5078	< 0.0001	0.0020						
Liking for fat-	-0.21749	0.04666	-0.08523	0.01848	-0.17482	0.02598	1				
and-salt	< 0.0001	< 0.0001	< 0.0001	0.0980	< 0.0001	0.0200					
Liking for fat- and-sweet	-0.30263	0.05075	-0.12542	-0.03097	-0.14578	0.05164	0.54366	1			
	< 0.0001	< 0.0001	< 0.0001	0.0056	< 0.0001	< 0.0001	< 0.0001				
Cognitive	0.11034	-0.05804	0.03785	0.01900	0.03625	0.47958	-0.10797	-0.03280	1		
restraint	< 0.0001	< 0.0001	0.0007	0.0890	0.0012	< 0.0001	< 0.0001	0.0033			
Emotional eating	-0.18662	0.00767	-0.08668	-0.06594	-0.10530	0.32598	0.09024	0.19157	0.30987	1	
	< 0.0001	0.4927	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001		

**Supplemental Table S2.** Correlation of baseline characteristics of included participants, NutriNet-Santé cohort, n = 8014.

Uncontrolled	-0.15916	-0.00850	-0.07990	0.01206	-0.07418	0.24648	0.21751	0.23632	0.24010	0.59782	1
eating	< 0.0001	0.4468	< 0.0001	0.2804	< 0.0001	< 0.0001	< 0.0001	<0.0001	<0.0001	< 0.0001	

Correlation coefficient and *p*-values of Pearson correlation for age, liking for fat-and-salt, liking for fat-and-sweet, cognitive restraint, emotional eating and uncontrolled eating scores, and Spearman correlation for educational level, income, smoking status, physical activity, and dieting to lose weight.

	Included participants	<b>Excluded participants</b>		
	n = 8014	N = 6606	<i>p</i> -value	
General characteristics				
Age, y	$51.8 \pm 13.1$	$50.0 \pm 13.6$	< 0.0001	
Women, %	71.5	73.3	0.019	
BMI, kg/m²	$23.8 \pm 4.2$	$24.0 \pm 4.4$	0.056	
Educational level, % <sup>1</sup>			< 0.0001	
Elementary school	2.8	3.6		
Secondary school	31.4	35.8		
College graduate	29.7	29.9		
Advanced degree	36.1	30.7		
Income per consumption unit, $\in 1$	$2377.8 \pm 1218.9$	$2241.8 \pm 1223.7$	< 0.0001	
Smoking status, % <sup>1</sup>			< 0.0001	
Never-smoker	49.7	49.6		
Former smoker	39.3	37.5		
Current smoker	11.0	12.9		

**Supplemental Table S3.** Comparison of baseline characteristics between included and excluded participants which have available anthropometric data at baseline and at five-year follow-up, n = 14,620, NutriNet-Santé cohort, May 2010.

*p*-values are for comparison between included and excluded participants and were determined using Student's *t*-test or chi-square test as appropriate.

<sup>1</sup> For 14,190 individuals.

	Included participants	Excluded particip	pants	
	n = 8014	n = 41,804	p	v-value
General characteristics				
Age, y	51.8	± 13.1	$43.9 \pm 14.5$	< 0.0001
Women, %		71.5	77.8	< 0.0001
BMI, kg/m <sup>2</sup>	23.	8 ± 4.2	$23.9 \pm 4.7$	0.24
Educational level, % <sup>2</sup>				< 0.0001
Elementary school		2.8	3.1	
Secondary school		31.4	34.9	
College graduate		29.7	30.3	
Advanced degree		36.1	31.7	
Income per consumption unit, $\in 2$	2377.8 ±	1218.9	$2098.1 \pm 1186.1$	< 0.0001
Smoking status, % <sup>2</sup>				< 0.0001
Never-smoker		49.7	49.1	
Former smoker		39.3	34.3	
Current smoker		11.0	16.6	

**Supplemental Table S4.** Comparison of baseline characteristics between included and excluded participants of the analyses, NutriNet-Santé cohort, n = 49,818, May 2010.

*p*-values are for comparison between included and excluded participants and were determined using Student's *t*-test or chi-

square test as appropriate.

<sup>1</sup> For 31,407 individuals.