

SUPPLEMENTAL CONTENT

Supplementary eTable 1. Construction of the modified Mediterranean diet score.

Diet Component ¹	Original recommendation	Serving size	Recommendation in Servings/Week
Encouraged			
Fish and seafood	≥3 svg/wk	Fish: 125g Seafood: 200g	≥3 svg/wk
Fruits and berries	≥3 units/day	100g ⁵	≥21 svg/wk
Nuts and seeds	≥3 svg/wk	30g	≥3 svg/wk
Vegetables and legumes	Vegetables: ≥2 svg/d or ≥1 svg/d raw Legumes: ≥3svg/wk	300g ⁴	≥7 svg/wk
Vegetable oils ²	≥ 4 tablespoons/d	13.5g ³	≥28 svg/wk
Wine	≥7 svg/week	100g	≥7 svg/wk
Discouraged			
Butter, margarine, cream	<1 svg/d	12g	<7 svg/wk
Red and processed meat	<1 svg/d	125g	<7 svg/wk
Soda	<1 svg/d	200g	<7 svg/wk
Sweets and confectionary	<3 svg/wk	Pastries: 50g Sweets, chocolate: 30g	<3 svg/wk

¹ Original recommendations as stated by Martínez-González et al.¹⁴ ² Vegetable oils is a composite variable of vegetable oils to use in opposition of solid or animal fats for culinary purposes (the original MDS only considered olive oil for this item). ³ One tablespoon = 13.5 g according to Schröder et al 2011 (ref).

⁴ An average serving size of 300g was established for the pooled vegetable and legume intake to capture the differences in the recommendations established by the original mMDS. ⁵ The serving sizes for fruit and berry intake in the original MDS were calculated based on their respective carbohydrate content, however we established a standard serving size of 100 g to be used as an average portion size. ⁶ In the original MDS, this category refers only to commercial or store-bought baked goods, however we were unable to separate home-made from store-bought pastries in MDCS so both types are included in this category.

Supplementary eTable 2. Construction of the Mediterranean diet score, Panagiotakos et al.¹⁵

Diet Component	Frequency of consumption (servings/month)					
	Never	1-4	5-8	9-12	13-18	>18
Whole grain bread, pasta, rice, etc.	0	1	2	3	4	5
Potatoes	0	1	2	3	4	5
Fruits	0	1	2	3	4	5
Vegetables and legumes ¹	0	1	2	3	4	5
Fish	0	1	2	3	4	5
Red meat and products	5	4	3	2	1	0
Poultry	5	4	3	2	1	0
Full fat dairy products (cheese, yoghurt and milk >3%)	5	4	3	2	1	0
Vegetable oils ² in cooking (times/week)	Never	Rare	<1	1-3	3-5	Daily
	0	1	2	3	4	5
Alcoholic beverages (g ethanol/day)	<36g	36-47g	48-59g	60-71g	72-83g	>84g
	5	4	3	2	1	0

¹ Original recommendations considered vegetables and legumes separately, are here incorporated in one due to low consumption of legumes in MDCS. ² Vegetable oils is a composite variable of vegetable oils to use in opposition of solid or animal fats for culinary purposes (the original only considered olive oil for this component).

The original scored from 0-55, here 0-50 points due to vegetables and legumes accounted as one.

Supplementary eTable 3.

Comparison missing data.

	Excluded (N=2421)	Complete dataset (N=28025)	Total (N=30446)	<i>p-value</i>
Age, mean, (SD), y	57.0 (7.25)	58.1 (7.62)	58.0 (7.60)	<0.001
Sex, women	1,334 (55%)	16,992 (61%)	18,326	<0.001
Education level, n (%)				
Elementary school (<8 years)	195 (8.1%)	11,776 (42.0%)	11,971 (39.3%)	Not relevant (due to missing)
9-12 years	142 (5.9%)	9,823 (35.1%)	9,965 (32.7%)	Not relevant (due to missing)
≥ 13 years	137 (5.7%)	6,426 (22.9%)	6,563 (21.6%)	Not relevant (due to missing)
Missing	1947 (80.4%)	0 (0%)	1947 (6.4%)	
Incident dementia, n (%)	177 (7,3%)	1943 (6,9%)	2120 (7,0%)	0.48

Supplementary eTable 4. Baseline characteristics across Swedish Dietary Guidelines Score adherence levels.

	Swedish Dietary Guidelines Score 0-1 (worst)^e	Swedish Dietary Guidelines Score 2-3 (intermediate)^e	Swedish Dietary Guidelines Score 4-5 (best)^e	<i>p-value 0-1 vs 2-3</i>	<i>p-value 0-1 vs 4-5</i>	<i>p-value 2-3 vs 4-5</i>
<i>n</i>	11,392	12,947	3,686			
Age, mean, (SD), y	57.8 (7.67)	58.4 (7.57)	58.3 (7.60)	<0.001	<0.001	0.50
Sex, women	6158 (54.1%)	7952 (61.4%)	2882 (78.2%)	<0.001	<0.001	<0.001
Education level, <i>n</i> (%)						
Elementary school (<8 years)	5491 (48.2%)	5096 (39.4%)	1189 (32.3%)	<0.001	<0.001	<0.001
9-12 years	3834 (33.7%)	4653 (35.9%)	1336 (36.2%)	<0.001	0.004	0.73
≥ 13 years	2067 (18.1%)	3198 (24.7%)	1161 (31.5%)	<0.001	<0.001	<0.001
Total energy intake, mean (SD), (kJ/day)	9820 (2710)	9520 (2800)	8640 (2350)	<0.001	<0.001	<0.001
Smoking, <i>n</i> (%)						
Current smoker	3999 (35.1%)	3231 (25.0%)	692 (18.8%)	<0.001	<0.001	<0.001
Former smoker	3589 (31.5%)	4525 (35.0%)	1369 (37.1%)	<0.001	<0.001	0.01
Never smoker	3799 (33.3%)	5187 (40.1%)	1623 (44.0%)	<0.001	<0.001	<0.001

	Swedish Dietary Guidelines Score 0-1 (worst)^e	Swedish Dietary Guidelines Score 2-3 (intermediate)^e	Swedish Dietary Guidelines Score 4-5 (best)^e	<i>p-value 0-1 vs 2-3</i>	<i>p-value 0-1 vs 4-5</i>	<i>p-value 2-3 vs 4-5</i>
Physical activity (MET_h/week)^b, mean (SD)	3.20 (1.24)	3.40 (1.17)	3.59 (1.09)	<0.001	<0.001	<0.001
Alcohol consumption, g/day, mean (SD)	10.8 (13.3)	11.2 (12.8)	9.10 (10.2)	<0.001	<0.001	<0.001
Body Mass Index^c, mean (SD)	25.6 (3.93)	25.9 (3.99)	25.6 (4.02)	<0.001	0.47	<0.001
Coronary event or stroke	336 (2.9%)	388 (3.0%)	95 (2.6%)	0.83	0.24	0.18

Supplementary eTable 5. Baseline characteristics across modified Mediterranean diet score adherence levels.

	Modified Mediterranean Diet Score 0-1 (worst)^e	Modified Mediterranean Diet Score 2-4 (intermediate)^e	Modified Mediterranean Diet Score 5-10 (best)^e	<i>p-value</i> <i>0-1 vs 2-4</i>	<i>p-value</i> <i>0-1 vs 5-10</i>	<i>p-value</i> <i>2-4 vs 5-10</i>
<i>n</i>	4,833	21,061	2,131			
Age, mean, (SD), y	57.6 (7.37)	58.4 (7.70)	56.8 (7.20)	<0.001	<0.001	<0.001
Sex, women	2027 (41.9%)	13490 (64.1%)	1475 (69.2%)	<0.001	<0.001	<0.001
Education level, <i>n</i> (%)						
Elementary school (<8 years)	2616 (54.1%)	8625 (41.0%)	535 (25.1%)	<0.001	<0.001	<0.001
9-12 years	1543 (31.9%)	7544 (35.8%)	736 (34.5%)	<0.001	0.032	0.24
≥ 13 years	674 (13.9%)	4892 (23.2%)	860 (40.4%)	<0.001	<0.001	<0.001
Total energy intake, mean (SD), (kJ/day)	10600 (2760)	9310 (2680)	9210 (2650)	<0.001	<0.001	0.27
Smoking, <i>n</i> (%)						
Current smoker	1621 (33.5%)	5793 (27.5%)	508 (23.8%)	<0.001	<0.001	<0.001
Former smoker	1593 (33.0%)	7020 (33.3%)	870 (40.8%)	0.63	<0.001	<0.001

	Modified Mediterranean Diet Score 0-1 (worst)^e	Modified Mediterranean Diet Score 2-4 (intermediate)^e	Modified Mediterranean Diet Score 5-10 (best)^e	<i>p-value</i> <i>0-1 vs 2-4</i>	<i>p-value</i> <i>0-1 vs 5-10</i>	<i>p-value</i> <i>2-4 vs 5-10</i>
Never smoker	1616 (33.4%)	8240 (39.1%)	753 (35.3%)	<0.001	0.13	<0.001
Physical activity (METh/week)^b, mean (SD)	3.21 (1.24)	3.34 (1.19)	3.58 (1.12)	<0.001	<0.001	<0.001
Alcohol consumption, g/day, mean (SD)	9.34 (11.6)	10.5 (12.5)	16.5 (15.2)	<0.001	<0.001	<0.001
Body Mass Index^c, mean (SD)	26.1 (4.03)	25.7 (3.97)	25.4 (3.82)	<0.001	<0.001	0.008
Coronary event or stroke	156 (3.2%)	603 (2.9%)	60 (2.8%)	0.18	0.36	0.90

Supplementary eTable 6. Association between Swedish Dietary Guidelines Score and Dementia in participants without incident dementia <5y.

	All-Cause Dementia		Alzheimer's Disease Dementia		Vascular Dementia	
No. of cases/Total No.						
>5 years incident dementia	1,870/27,952		1,098/27,952		439/27,952	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Swedish Dietary Guidelines Score 0-5^d	0.99 (0.95-1.03)	1.00 (0.96-1.03)	1.01 (0.96-1.05)	1.00 (0.95-1.05)	0.98 (0.91-1.06)	1.01 (0.93-1.09)
Swedish Dietary Guidelines Score 0-1 (worst)^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]
Swedish Dietary Guidelines Score 2-3 (intermediate)^e	1.00 (0.84-1.12)	1.02 (0.92-1.13)	1.09 (0.95-1.24)	1.08 (0.95-1.24)	0.91 (0.75-1.12)	0.95 (0.78-1.17)
Swedish Dietary Guidelines Score 4-5 (best)^e	0.97 (0.84-1.12)	0.98 (0.85-1.14)	1.07 (0.89-1.29)	1.06 (0.88-1.28)	0.96 (0.71-1.30)	1.02 (0.75-1.40)

^aEstimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Swedish Dietary Guidelines Score examined as continuous measure 0-5 points, (poor to good adherence to dietary recommendations).

^e Swedish Dietary Guidelines Score examined as three different groups (0-1 (reference), 2-3 and 4-5 points).

Supplementary eTable 7. Association between Swedish Dietary Guidelines Score and Dementia in participants without prevalent or incident diabetes.

	All-Cause Dementia		Alzheimer’s Disease Dementia		Vascular Dementia	
No. of cases/Total No.						
Without prevalent or incident diabetes mellitus	1,538/22,804		932/22,804		321/22,804	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Swedish Dietary Guidelines Score 0-5^d	0.98 (0.94-1.02)	0.99 (0.95-1.03)	0.97 (0.93-1.03)	0.97 (0.92-1.02)	1.01 (0.92-1.10)	1.04 (0.95-1.14)
Swedish Dietary Guidelines Score 0-1 (worst)^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]
Swedish Dietary Guidelines Score 2-3 (intermediate)^e	0.99 (0.89-1.11)	1.02 (0.91-1.13)	1.05 (0.91-1.21)	1.05 (0.91-1.21)	0.88 (0.70-1.12)	0.94 (0.74-1.20)

Swedish Dietary Guidelines	0.93 (0.79-1.09)	0.94 (0.80-1.11)	0.95 (0.77-1.17)	0.93 (0.76-1.15)	1.02 (0.72-1.44)	1.13 (0.79-1.60)
Score 4-5 (best)^e						

^a Estimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Swedish Dietary Guidelines Score examined as continuous measure 0-5 points, (poor to good adherence to dietary recommendations).

^e Swedish Dietary Guidelines Score examined as three different groups (0-1 (reference), 2-3 and 4-5 points).

Supplementary eTable 8. Association between modified Mediterranean Diet Score and Dementia in participants without incident dementia <5y.

	All-Cause Dementia		Alzheimer's Disease Dementia		Vascular Dementia	
No. of cases/Total No.						
>5 years incident dementia	1,870/27,952		1,098/27,952		439/27,952	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Modified Mediterranean Diet Score 0-10^d	1.00 (0.96-1.04)	1.00 (0.96-1.04)	1.00 (0.95-1.05)	0.99 (0.94-1.05)	1.03 (0.95-1.12)	1.06 (0.97-1.15)
Modified Mediterranean Diet Score 0-1 (worst)^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]
Modified Mediterranean Diet Score 2-4 (intermediate)^e	0.91 (0.74-1.15)	0.92 (0.81-1.05)	0.90 (0.76-1.06)	0.90 (0.76-1.07)	0.91 (0.71-1.17)	0.95 (0.73-1.23)

Modified Mediterranean Diet Score 5-10 (best)^e	0.92 (0.74-1.15)	0.94 (0.75-1.17)	0.91 (0.69-1.21)	0.88 (0.66-1.17)	0.97 (0.62-1.52)	1.03 (0.65-1.64)
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^a Estimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Modified Mediterranean Diet Score examined as continuous measure 0-10 points, (poor to good adherence to modified Mediterranean dietary recommendations).

^e Modified Mediterranean Diet Score examined as three different groups: Modified Mediterranean Diet Score 0-1 reflects poor adherence, (reference), 2-4 points (intermediate adherence) and 5-10 points (best adherence).

Supplementary eTable 9. Association between modified Mediterranean Diet Score and Dementia in participants without prevalent or incident diabetes.

	All-Cause Dementia		Alzheimer’s Disease Dementia		Vascular Dementia	
No. of cases/Total No.						
Without prevalent or incident diabetes mellitus	1,538/22,804		932/22,804		321/22,804	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Modified Mediterranean Diet Score 0-10^d	0.99 (0.95-1.03)	1.00 (0.96-1.05)	0.98 (0.92-1.03)	0.97 (0.92-1.03)	1.08 (0.98-1.18)	1.12 (1.01-1.23)
Modified Mediterranean Diet Score 0-1 (worst)^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]

Modified Mediterranean Diet Score 2-4 (intermediate)^e	0.92 (0.80-1.06)	0.95 (0.82-1.09)	0.93 (0.77-1.12)	0.93 (0.77-1.13)	0.93 (0.68-1.25)	0.99 (0.73-1.34)
Modified Mediterranean Diet Score 5-10 (best)^e	0.92 (0.73-1.17)	0.96 (0.75-1.22)	0.86 (0.63-1.18)	0.84 (0.61-1.16)	1.05 (0.63-1.76)	1.19 (0.70-2.01)

^a Estimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Modified Mediterranean Diet Score examined as continuous measure 0-10 points, (poor to good adherence to modified Mediterranean dietary recommendations).

^e Modified Mediterranean Diet Score examined as three different groups: Modified Mediterranean Diet Score 0-1 reflects poor adherence, (reference), 2-4 points (intermediate adherence) and 5-10 points (best adherence).

Supplementary eTable 10. Association between Swedish Dietary Guidelines Score and Dementia without participants who indicated a substantial change in dietary habits.

	All-Cause Dementia		Alzheimer's Disease Dementia		Vascular Dementia	
No. of cases/Total No.						
Without dietary changes	1,406/21,158		819/21,158		323/21,158	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Swedish Dietary Guidelines Score 0-5 ^d	0.98 (0.94-1.02)	0.99 (0.94-1.03)	1.02 (0.96-1.08)	1.02 (0.96-1.08)	0.93 (0.85-1.02)	0.96 (0.87-1.05)
Swedish Dietary Guidelines Score 0-1 (worst) ^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]
Swedish Dietary Guidelines Score 2-3 (intermediate) ^e	1.00 (0.89-1.12)	1.03 (0.92-1.15)	1.11 (0.96-1.29)	1.11 (0.96-1.29)	0.84 (0.67-1.06)	0.91 (0.72-1.15)
Swedish Dietary Guidelines Score 4-5 (best) ^e	0.88 (0.873-1.06)	0.89 (0.73-1.07)	1.07 (0.85-1.34)	1.05 (0.83-1.33)	0.81 (0.54-1.21)	0.87 (0.58-1.30)

^a Estimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Swedish Dietary Guidelines Score examined as continuous measure with 0-5 points, (poor to good adherence to dietary recommendations).

^e Swedish Dietary Guidelines Score examined as three different groups (0-1 (reference), 2-3 and 4-5 points).

Supplementary eTable 11. Association between modified Mediterranean Diet Score and Dementia without participants who indicated a substantial change in dietary habits.

No. of cases/Total No.	All-Cause Dementia		Alzheimer's Disease Dementia		Vascular Dementia	
Without dietary changes	1,406/21,158		819/21,158		323/21,158	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Modified Mediterranean Diet Score 0-10^d	1.00 (0.95-1.04)	1.00 (0.96-1.05)	1.02 (0.96-1.08)	1.01 (0.95-1.08)	1.01 (0.92-1.11)	1.04 (0.94-1.15)
Modified Mediterranean Diet Score 0-1 (worst)^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]
Modified Mediterranean Diet Score 2-4 (intermediate)^e	0.92 (0.80-1.06)	0.94 (0.82-1.09)	0.95 (0.78-1.15)	0.95 (0.78-1.15)	0.85 (0.64-1.12)	0.89 (0.67-1.19)
Modified Mediterranean Diet Score 5-10 (best)^e	1.01 (0.77-1.31)	1.03 (0.78-1.34)	1.01 (0.72-1.43)	0.97 (0.68-1.38)	1.13 (0.67-1.90)	1.24 (0.72-2.13)

^a Estimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Modified Mediterranean Diet Score examined as continuous measure 0-10 points, (poor to good adherence to modified Mediterranean dietary recommendations).

^e Modified Mediterranean Diet Score examined as three different groups: Modified Mediterranean Diet Score 0-1 reflects poor adherence, (reference), 2-4 points (intermediate adherence) and 5-10 points (best adherence).

Supplementary eTable 12. Association between Mediterranean Diet Score according to Panagiotakos et al.¹⁵ and incident All-Cause Dementia, Alzheimer’s Disease Dementia and Vascular Dementia.

	All-Cause Dementia		Alzheimer’s Disease Dementia		Vascular Dementia	
Age, mean (SD)	64.3 (5.9)		64.4 (5.8)		65.0 (5.7)	
No. of cases/Total No.	1,943/28,025		1,137/28,025		461/28,025	
	Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a		Adjusted Hazard Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c	Model 1 ^b	Model 2 ^c
Mediterranean Diet Score 0-50^d	0.99 (0.98-1.01)	1.00 (0.99-1.01)	1.00 (0.99-1.02)	1.00 (0.99-1.02)	0.98 (0.96-1.00)	0.99 (0.97-1.01)
Mediterranean Diet Score 0-27 (worst)^e	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]	[Reference]
Mediterranean Diet Score 28-31 (intermediate)^e	0.96 (0.86-1.07)	0.96 (0.86-1.07)	0.95 (0.82-1.10)	0.93 (0.81-1.08)	0.94 (0.75-1.18)	0.98 (0.78-1.23)

Mediterranean Diet Score	0.94 (0.84-1.05)	0.95 (0.85-1.07)	0.95 (0.82-1.11)	0.95 (0.81-1.10)	0.93 (0.74-1.18)	1.00 (0.79-1.27)
32-50 (best)^e						

^a Estimated using Cox Proportional Hazard models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b *Model 1* adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c *Model 2* adjusted for *Model 1* and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Mediterranean Diet Score examined as continuous measure 0-50 points, (poor to good adherence to Mediterranean dietary recommendations).

^e Mediterranean Diet Score examined in tertiles: Mediterranean Diet Score 0-27 points reflect poor adherence, (reference), 28-31 points (intermediate adherence) and 32-50 points (best adherence).

Supplementary eTable 13. Interaction effects between Swedish Dietary Guidelines Score and *APOE* ε4 and incident All-Cause Dementia, Alzheimer’s Disease Dementia and Vascular Dementia

	All-Cause Dementia	Alzheimer’s Disease Dementia	Vascular Dementia
Age, mean (SD)	64.3 (5.9)	64.4 (5.8)	65.0 (5.7)
No. of cases/Total No.	1,943/28,025	1,137/28,025	461/28,025
	<i>p</i> ^a adjusted for ^b	<i>p</i> ^a adjusted for ^b	<i>p</i> ^a adjusted for ^b
Swedish Dietary Guidelines Score 0-5^c * <i>APOE</i> ε4	0.18	0.82	0.88
Swedish Dietary Guidelines Score 0-1^d * <i>APOE</i> ε4	0.33	0.99	0.79
Swedish Dietary Guidelines Score 2-3^d * <i>APOE</i> ε4	0.43	0.88	0.62

Swedish Dietary Guidelines Score 4-5^d*	0.81	0.85	0.74
<i>APOE</i> ε4			

^a Estimated using general linear models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Swedish Dietary Guidelines Score examined as continuous measure 0-5 points, (poor to good adherence to dietary recommendations).

^d Swedish Dietary Guidelines Score examined as three different groups (0-1 (reference), 2-3 and 4-5 points).

Supplementary eTable 14. Interaction effects between modified Mediterranean Diet Score and <i>APOE</i> ϵ4 and incident All-Cause Dementia, Alzheimer's Disease and Vascular Dementia			
	All-Cause Dementia	Alzheimer's Disease Dementia	Vascular Dementia
Age, mean (SD)	64.3 (5.9)	64.4 (5.8)	65.0 (5.7)
No. of cases/Total No.	1,943/28,025	1,137/28,025	461/28,025
	<i>p</i> ^a adjusted for ^b	<i>p</i> ^a adjusted for ^b	<i>p</i> ^a adjusted for ^b
Modified Mediterranean Diet Score 0-10^c * <i>APOE</i> ϵ 4	0.23	0.40	0.63
Modified Mediterranean Diet Score 0-1^d * <i>APOE</i> ϵ 4	0.39	0.52	0.67
Modified Mediterranean Diet Score 2-4^d * <i>APOE</i> ϵ 4	0.76	0.92	0.75

Modified Mediterranean Diet Score 5-10^d * <i>APOE</i> ε4	0.44	0.43	0.90
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^a Estimated using general linear models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Modified Mediterranean Diet Score examined as continuous measure 0-10 points, (poor to good adherence to modified Mediterranean dietary recommendations).

^d Modified Mediterranean Diet Score examined as three different groups: Modified Mediterranean Diet Score 0-1 reflects poor adherence, (reference), 2-4 points (intermediate adherence) and 5-10 points (best adherence).

Supplementary eTable 15. Association between Swedish Dietary Guidelines Score and abnormal β-Amyloid in cerebrospinal fluid.		
	Abnormal β -Amyloid in CSF	
No. of cases/Total No.	542/738	
	Adjusted Odds Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c
Swedish Dietary Guidelines Score 0-5^d	1.14 (0.99-1.31)	1.15 (0.99-1.33)
Swedish Dietary Guidelines Score 0-1^e	[Reference]	[Reference]
Swedish Dietary Guidelines Score 2-3^e	1.31 (0.90-1.91)	1.37 (0.94-2.01)
Swedish Dietary Guidelines Score 4-5^e	1.28 (0.74-2.24)	1.34 (0.76-2.36)

^a Estimated using general linear models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Swedish Dietary Guidelines Score examined as continuous measure 0-5 points, (poor to good adherence to dietary recommendations).

^e Swedish Dietary Guidelines Score examined as three different groups (0-1 (reference), 2-3 and 4-5 points).

Supplementary eTable 16. Association between modified Mediterranean Diet Score and abnormal β-Amyloid in cerebrospinal fluid.		
	Abnormal β -Amyloid in CSF	
No. of cases/Total No.	542/738	
	Adjusted Odds Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c
Modified Mediterranean Diet Score 0-10^d	0.98 (0.85-1.14)	0.99 (0.85-1.15)
Modified Mediterranean Diet Score 0-1^e	[Reference]	[Reference]
Modified Mediterranean Diet Score 2-4^e	1.04 (0.65-1.67)	1.01 (0.37-1.79)
Modified Mediterranean Diet Score 5-10^e	0.85 (0.39-1.84)	0.82 (0.37-1.79)

^a Estimated using general linear models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

^b Model 1 adjusted for sex, age, education, dietary assessment method, season and total calory intake.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption and body mass index.

^d Modified Mediterranean Diet Score examined as continuous measure 0-10 points, (poor to good adherence to modified Mediterranean dietary recommendations).

^e Modified Mediterranean Diet Score examined as three different groups: Modified Mediterranean Diet Score 0-1 reflects poor adherence, (reference), 2-4 points (intermediate adherence) and 5-10 points (best adherence).

Supplementary eTable 17. Association between Mediterranean Diet Score according to Panagiotakos et al.¹⁵ and abnormal β-Amyloid in cerebrospinal fluid.		
	Abnormal β -Amyloid in CSF	
No. of cases/Total No.	542/738	
	Adjusted Odds Ratio (95% CI) ^a	
	Model 1 ^b	Model 2 ^c
Mediterranean Diet Score 0-50^d	0.98 (0.93-1.02)	0.98 (0.93-1.02)
Mediterranean Diet Score 0-27 (worst)^e	[Reference]	[Reference]
Mediterranean Diet Score 28-31 (intermediate)^e	0.95 (0.62-1.46)	0.93 (0.60-1.44)
Mediterranean Diet Score 32-50 (best)^e	0.80 (0.53-1.20)	0.80 (0.54-1.21)

^aEstimated using general linear models. Participants were followed from baseline (1991-1996) until December 31, 2014, or date of death.

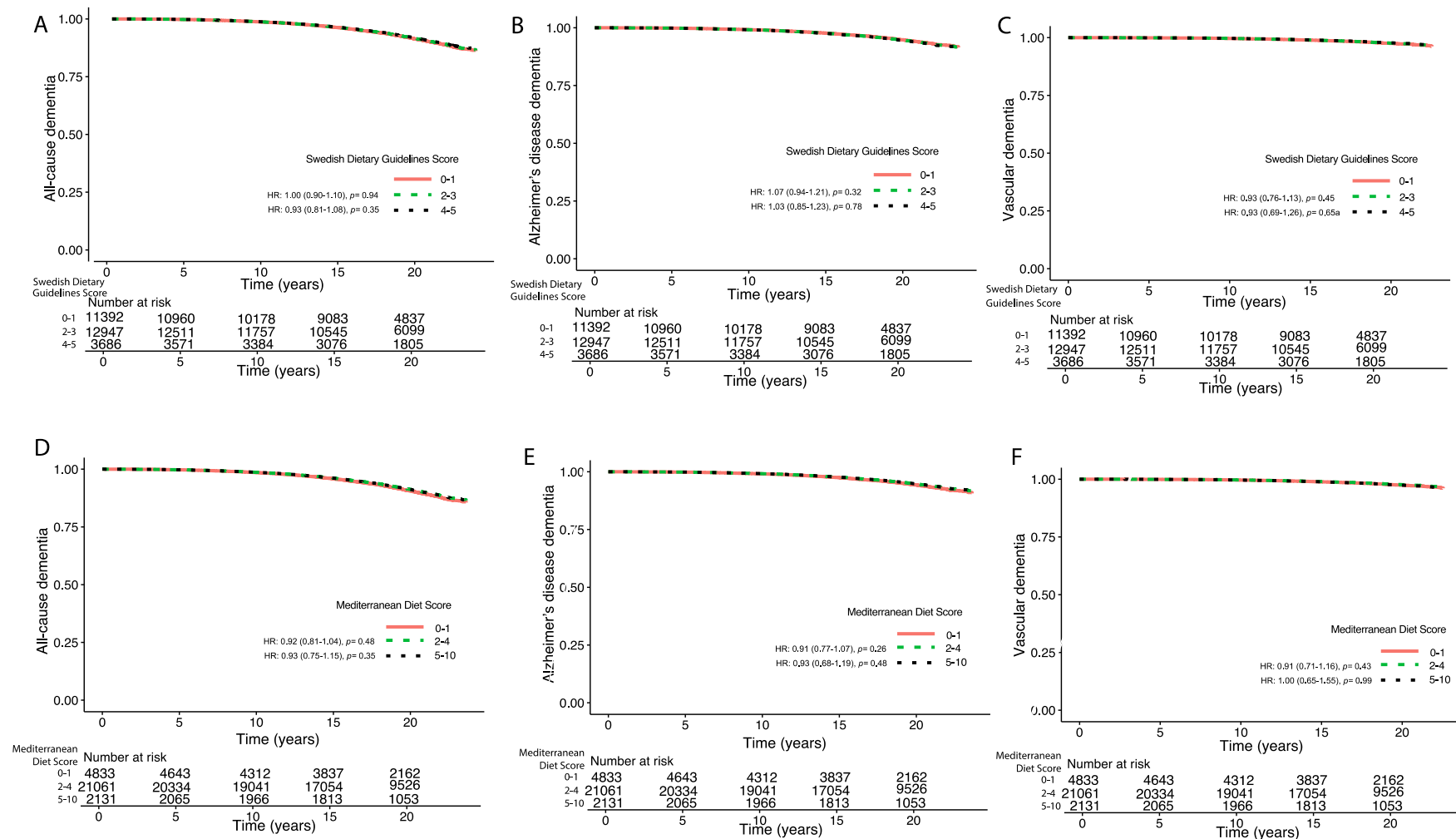
^b Model 1 adjusted for sex, age, education, dietary assessment method, season, total calory intake and time between baseline and CSF collection.

^c Model 2 adjusted for model 1 and additionally adjusted for smoking, physical activity, alcohol consumption, time between baseline and CSF collection and body mass index.

^d Mediterranean Diet Score examined as continuous measure 0-50 points, (poor to good adherence to Mediterranean dietary recommendations).

^e Mediterranean Diet Score examined as three different groups: Modified Mediterranean Diet Score 0-27 reflects poor adherence (reference), 28-31 points (intermediate adherence) and 32-50 points (best adherence).

Supplementary eFigure 1. Kaplan-Meier Curves displaying diet quality and incidence in all-cause Dementia, Alzheimer's disease dementia and Vascular Dementia.



Adjusted Kaplan-Meier Curves showing the effects of diet quality and incidence of all-cause dementia, Alzheimer's disease dementia and Vascular dementia. Figures A-C displaying the Swedish Dietary Guidelines Score as three different groups: 0-1 points reflect poor adherence (reference), 2-3 (intermediate adherence) and 4-5 points (best adherence), and incidence in all-cause dementia (A), Alzheimer's disease dementia (B) and Vascular dementia (C). Figures D-F displaying the modified Mediterranean Diet Score as three different groups: 0-1 points reflect poor adherence (reference), 2-4 points (intermediate adherence) and 5-10 points (best adherence), and incidence in all-cause dementia (D), Alzheimer's disease dementia (E) and Vascular dementia (F). HR represents hazard ratios from the adjusted Cox regression *Model 1*, adjusted for sex, age, education, dietary assessment method, season and total calory intake.