

**Table S1.** Baseline characteristics.

	Male	Female	p-value for Trend
<b>n (%), median [IQR], * mean/SD</b>	4892	5108	
<b>DEMOGRAPHICS</b>			
Age	64.00 [56.00,70.00]	62.00 [55.00,69.00]	<0.001
Education			<0.001
Low	149 (3.2)	295 (6.1)	
Medium	1990 (43.2)	2840 (58.8)	
High	2465 (53.5)	1698 (35.1)	
<b>CARDIOVASCULAR RISK</b>			
BMI	26.68 [24.50,29.44]	25.30 [22.63,28.89]	<0.001
Smoking	981 (20.2)	997 (19.6)	<0.505
Diabetes	490 (10.8)	304 (6.5)	<0.001
Hypertension	3398 (73.1)	2903 (59.5)	<0.001
<b>LABORATORIES</b>			
IL6	1.67 [1.22,2.38]	1.55 [1.12,2.25]	<0.001
CRP	0.12 [0.06,0.26]	0.12 [0.06,0.27]	0.334
<b>NUTRITION</b>			
Total energy (kcal/day)	2391.24 [1937.93,2935.64]	1761.34 [1443.94,2133.69]	<0.001
Fibre (g/day)	20.42 [15.74,25.78]	17.32 [13.91,21.65]	<0.001
Protein (g/day)	84.20 [67.54,102.98]	61.76 [50.00,74.99]	<0.001
Fat (g/day)	104.78 [84.16,131.06]	77.38 [62.57,94.87]	<0.001
Carbohydrates (g/day)	227.70 [177.25,287.87]	172.00 [137.68,216.20]	<0.001
Alcohol (g/day)	13.70 [4.09,29.45]	6.21 [1.62,16.73]	<0.001
Saccharides	96.60 [72.05,128.16]	83.95 [64.05,109.81]	<0.001
DASH diet	4.00 [3.50,5.00]	5.00 [4.00,5.50]	<0.001
Mediterranean Diet	4.00 [3.00,5.00]	5.00 [4.00,6.00]	<0.001
<b>PHYSICAL ACTIVITY</b>			
Physical activity	2826 (66.0)	3239 (73.1)	<0.001
Sport (h/week)	2.00 [0.00,4.00]	2.00 [0.00,4.00]	0.001
<b>DENTAL VARIABLES</b>			
DMFT index	19.00 [15.00,24.00]	20.00 [16.00,23.00]	0.741
BOP index	8.70 [2.00,21.43]	7.41 [1.85,19.23]	0.001
Plaque index	12.50 [0.00,38.02]	5.56 [0.00,23.08]	<0.001
<b>PERIODONTITIS</b>			
None/mild PA	575 (18.8)	878 (27.9)	
Moderate PA	1766 (57.8)	1814 (57.6)	
Severe PA	716 (23.4)	460 (14.6)	

**Abbreviations:** BMI = Body Mass Index, BOP Index = Bleeding on Probing Index, DMFT Index = Decayed, Missing, Filled, Teeth Index, CRP = High sensitive c-reactive protein, IL6 = Interleukin 6, PA = periodontitis.

**Table S2.** Baseline dental characteristics stratified according to DASH Diet.

	<b>Low:Male</b>	<b>High:Male</b>	<b>Medium:Male</b>	<b>Low:Female</b>	<b>High:Female</b>	<b>Medium:Female</b>
<b>n*</b>	1651	16	2736	608	27	3982
<b>DMFT-index</b>	20.00 [16.00,24.00]	18.50 [14.00,22.00]	19.00 [15.00,23.00]	20.00 [16.00,24.00]	19.00 [13.75,21.25]	19.00 [16.00,23.00]
<b>BOP index</b>	8.93 [2.08,23.08]	4.95 [3.70,12.01]	8.33 [2.00,20.28]	7.14 [1.82,20.83]	8.33 [1.44,15.43]	7.14 [1.85,18.75]
<b>Plaque index</b>	12.50 [0.00,39.29]	6.33 [0.00,40.74]	11.54 [0.00,35.19]	7.14 [0.00,23.80]	6.25 [0.00,23.08]	5.26 [0.00,22.73]
<b>Periodontitis (%)</b>						
<b>None/mild</b>	199 (19.8)	2 (20.0)	333 (18.9)	105 (28.8)	7 (35.0)	681 (27.5)
<b>Moderate</b>	572 (56.9)	6 (60.0)	1026 (58.2)	203 (55.6)	11 (55.0)	1446 (58.4)
<b>Severe</b>	235 (23.4)	2 (20.0)	405 (23.0)	57 (15.6)	2 (10.0)	350 (14.1)

**Abbreviations:** BOP Index = Bleeding on Probing Index, DMFT Index = Decayed, Missing, Filled, Teeth Index, n\* = Adherence score could be assessed for 9020 participants – every column does not sum up to 100%, because of missing values for different variables.

**Table S3.** Baseline dental characteristics stratified according to Mediterranean Diet.

	<b>Low:Male</b>	<b>High:Male</b>	<b>Medium:Male</b>	<b>Low:Female</b>	<b>High:Female</b>	<b>Medium:Female</b>
<b>n*</b>	2904	10	1489	1685	41	2891
<b>DMFT-index</b>	20.00 [16.00,24.00]	15.00 [13.00,19.00]	19.00 [15.00,23.00]	20.00 [16.00,23.00]	22.50 [16.75,26.25]	19.00 [16.00,23.00]
<b>BOP index</b>	9.09 [2.08,23.21]	9.09 [4.91,13.85]	7.41 [1.92,18.42]	7.69 [1.92,21.15]	11.61 [0.45,26.34]	7.14 [1.85,18.00]
<b>Plaque index</b>	12.50 [0.00,38.46]	3.57 [0.00,54.63]	10.71 [0.00,32.69]	6.25 [0.00,25.00]	3.57 [0.00,22.73]	4.76 [0.00,21.15]
<b>Periodontitis (%)</b>						
<b>None/mild</b>	359 (19.7)	2 (33.3)	173 (18.2)	285 (27.5)	5 (19.2)	503 (28.0)
<b>Moderate</b>	1040 (57.0)	2 (33.3)	562 (59.2)	593 (57.2)	17 (65.4)	1050 (58.4)
<b>Severe</b>	425 (23.3)	2 (33.3)	215 (22.6)	159 (15.3)	4 (15.4)	246 (13.7)

**Abbreviations:** BOP Index = Bleeding on Probing Index, DMFT Index = Decayed, Missing, Filled, Teeth Index, n\* = Adherence score could be assessed for 9020 participants – every column does not sum up to 100%, because of missing values for different variables.

**Table S4.** Logistic regression: outcome binary variable periodontitis (no vs. severe periodontitis), exposure DASH Diet.

Variable	Units	Odds Ratio	95% CI	p-value
<b>DASH diet</b>		0.90	[0.82;0.98]	0.0201
<b>Age</b>		1.08	[1.07;1.10]	<0.001
<b>Sex</b>	Male	Ref		
	Female	0.48	[0.40;0.58]	<0.001
<b>DASH diet</b>		0.91	[0.83;0.99]	0.0341
<b>Age</b>				
	45-54	Ref		
	55-64	2.55	[2.01;3.24]	<0.001
	65-74	4.71	[3.70;5.98]	<0.001
	75+	8.55	[5.55;13.20]	<0.001
<b>Sex</b>	Male	Ref		
	Female	0.49	[0.40;0.58]	<0.001

**Abbreviations:** DASH = Dietary Approach to Stop Hypertension, CI = confidence

**Table S5.** Logistic regression: outcome binary variable periodontitis (no vs. severe periodontitis), exposure Mediterranean Diet.

Variable	Units	Odds Ratio	95% CI	p-value
<b>Mediterranean Diet</b>		0.94	[0.89;0.98]	0.00845
<b>Age</b>		1.08	[1.07;1.10]	<0.001
<b>Sex</b>	Male	Ref		
	Female	0.49	[0.41;0.59]	<0.001
<b>Mediterranean Diet</b>		0.94	[0.89;0.98]	0.0093
<b>Age</b>				
	45-54	Ref		
	55-64	2.53	[1.99;3.22]	<0.001
	65-74	4.66	[3.67;5.92]	<0.001
	75+	8.45	[5.49;13.02]	<0.001
<b>Sex</b>	Male	Ref		
	Female	0.49	[0.41;0.60]	<0.001

**Abbreviations:** CI = confidence