

**Table S1. Baseline main characteristics of the 16841 participants of the Seguimiento Universidad de Navarra (SUN) project according to fat quality [mean (standard deviations) or percentages]**

	Q1	Q2	Q3	Q4	Q5	P Value <sup>a</sup>
Score fat quality	0, 1·4	>1·4, 1·5	>1·5, 1·7	>1·7, 2·0	>2·0	
N	3369	3368	3368	3368	3368	
Age (years)	37 (12)	37 (12)	38 (12)	39 (12)	41 (13)	<0·001
Men (%)	44	44	42	39	35	<0·001 <sup>b</sup>
BMI (kg/m <sup>2</sup> )	23 (4)	24 (3)	24 (4)	26 (4)	24 (4)	0·17
Physical activity during leisure time (METs-h/week)	21 (23)	21 (21)	21 (22)	22 (22)	22 (21)	< 0·001
Smoking status:						< 0·001 <sup>b</sup>
Former smokers (%)	24	25	23	26	24	
Current smokers (%)	22	22	23	22	22	
Hypertension at baseline (%)	6	6	7	8	9	<0·001 <sup>b</sup>
Diabetes at baseline (%)	1	1	2	2	3	0·001 <sup>b</sup>
Dyslipemia at baseline (%)	3	4	4	4	6	< 0·001 <sup>b</sup>
Educational level (years of education)	5 (2)	5 (2)	5 (2)	5 (2)	5 (2)	0·003
Dietary supplement use	16	16	17	17	19	0·022
Mediterranean diet score	3 (2)	3 (2)	4 (1)	5 (2)	5 (2)	< 0·001
Glycemic index	51 (5)	2 (4)	52 (4)	53 (4)	53 (4)	< 0·001
Energy intake (kJ/d)	9355 (2552)	9611 (2519)	9799 (2485)	9782 (2456)	9510 (2527)	< 0·001
Carbohydrate intake (% total energy)	42 (8)	43 (7)	43 (7)	43 (7)	43 (8)	< 0·001
Solid carbohydrates (g/d)	208 (76)	214 (72)	219 (72)	217 (70)	214 (73)	< 0·001
Liquid carbohydrates (g/d)	14 (15)	15 (17)	15 (16)	15 (17)	13 (17)	0·01
Protein intake (% total energy)	19 (3)	19 (3)	18 (3)	18 (3)	17 (3)	< 0·001
Fat intake (% total energy)	37 (6)	37 (6)	37 (6)	37 (6)	37 (8)	< 0·001
PUFA intake (% total energy)	4 (1)	5 (1)	5 (1)	6 (2)	6 (2)	< 0·001
SFA intake (% total energy)	15 (3)	14 (2)	16 (2)	12 (2)	10 (2)	< 0·001
<i>n</i> -3 fatty acids	2 (1)	3 (1)	3(1)	3 (1)	3 (1)	< 0·001
<i>n</i> -6 fatty acids	17 (13)	18 (12)	19 (11)	18 (11)	17 (12)	< 0·001
MUFA intake (% total energy)	15 (3)	15 (3)	16 (3)	16 (4)	18 (5)	< 0·001
Fiber intake (g/d)	23 (10)	24 (9)	26 (10)	27 (10)	30 (12)	< 0·001
Alcohol intake (g/d)	6 (9)	7 (10)	7 (10)	8 (11)	7 (12)	< 0·001

**Table S1** (continued). Baseline main characteristics of the 16841 participants of the Seguimiento Universidad de Navarra (SUN) project according to fat quality [mean (standard deviations) or percentages]

	Q1	Q2	Q3	Q4	Q5	P Value <sup>a</sup>
Score fat quality	0, 1·4	>1·4, 1·5	>1·5, 1·7	>1·7, 2·0	>2·0	
N	3369	3368	3368	3368	3368	
Fruits (g/d)	285 (234)	292 (226)	314 (241)	339 (253)	378 (275)	< 0·001
Vegetables (g/d)	424 (252)	454 (24)	498 (262)	523 (278)	575 (291)	< 0·001
Legumes (g/d)	22 (19)	23 (18)	23 (18)	23 (17)	22 (19)	0·06
Dairy products (g/d)	298 (221)	223 (178)	184 (159)	150 (142)	96 (111)	< 0·001
Meats (g/d)	178 (77)	188 (76)	186 (75)	174 (71)	144 (68)	< 0·001
Fish (g/d)	84 (49)	91 (50)	97 (54)	98 (52)	102 (58)	< 0·001
Whole grains (g/d)	8 (22)	9 (22)	11 (25)	12 (28)	18 (35)	< 0·001
Refined grains (g/d)	78 (60)	85 (61)	90 (63)	91 (63)	89 (69)	< 0·001
Olive oil (g/d)	10 (8)	13 (9)	17 (11)	21 (13)	31 (20)	< 0·001
Nuts (g/d)	4 (5)	5 (6)	6 (9)	8 (11)	12 (18)	< 0·001
Zinc (mg/d)	16 (7)	16 (6)	16 (7)	16 (7)	17 (8)	< 0·001
Iodine (µg/d)	350 (169)	311 (155)	305 (157)	291 (152)	269 (156)	< 0·001
Selenium (µg/d)	87 (29)	91 (29)	94 (29)	95 (30)	93 (32)	< 0·001
Iron (mg/d)	16 (5)	17 (5)	17 (5)	17 (5)	17 (5)	< 0·001
Calcium (mg/d)	1307 (427)	1172 (366)	1153 (367)	1102 (355)	1025 (353)	< 0·001
Potassium (mg/d)	4210 (1294)	4420 (1274)	4631 (1313)	4731 (1332)	4794 (1422)	< 0·001
Phosphorus (mg/d)	1936 (492)	1870 (455)	1862 (445)	1810 (437)	1714 (438)	< 0·001
Magnesium (mg/d)	377 (105)	390 (103)	406 (108)	412 (108)	419 (119)	< 0·001
Chromium (µg/d)	75 (32)	78 (31)	79 (31)	80 (30)	78 (31)	< 0·001
Vitamin B <sub>1</sub> (mg/d)	2 (1)	2 (1)	1 (1)	2 (1)	2 (1)	< 0·001
Vitamin B <sub>2</sub> (mg/d)	2 (1)	2 (1)	2 (1)	2 (1)	2 (1)	< 0·001
Vitamin B <sub>3</sub> (mg/d)	41 (11)	42 (11)	42 (11)	42 (11)	40 (11)	< 0·001
Vitamin B <sub>6</sub> (mg/d)	3 (1)	3 (1)	2 (1)	3 (1)	3 (1)	< 0·001
Vitamin B <sub>12</sub> (µg/d)	9 (4)	10 (4)	10 (4)	9 (4)	9 (4)	< 0·001
Vitamin C (mg/d)	237 (120)	251 (122)	267 (125)	280 (131)	300 (139)	< 0·001

**Table S1 (continued). Baseline main characteristics of the 16841 participants of the Seguimiento Universidad de Navarra (SUN) project according to fat quality [mean (standard deviations) or percentages]**

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>P Value<sup>a</sup></b>
Score fat quality	0, 1·4	>1·4, 1·5	>1·5, 1·7	>1·7, 2·0	>2·0	
N	3369	3368	3368	3368	3368	
Vitamin A (µg/d)	1730 (1085)	1717 (1015)	1850 (1114)	1902 (1123)	2055 (1203)	< 0·001
Vitamin D (µg/d)	3 (2)	4 (2)	4 (2)	4 (2)	4 (3)	< 0·001
Vitamin E (mg/d)	6 (3)	6 (3)	7 (3)	8 (4)	9 (5)	< 0·001
Folic acid (µg/d)	360 (144)	376 (140)	397 (148)	410 (151)	434 (160)	< 0·001

<sup>a</sup> P values are shown for analysis of variance test adjusted for sex and age

<sup>b</sup> P values are shown for analysis of chi-square test

**Table S2. Prevalence of inadequate intake: % population below Estimated Average Requirement according to quintiles of carbohydrates quality, fat quality or Mediterranean diet score**

	Carbohydrates quality					Fat quality					Mediterranean diet score*				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
n	3564	3689	3768	2999	2821	3369	3368	3368	3368	3368	6245	3470	3186	2221	1719
Zinc (mg/d)	11	7	6	3	2	8	6	5	6	7	9	6	5	4	2
Iodine ( $\mu\text{g}/\text{d}$ )	13	9	7	7	6	5	7	8	9	15	8	10	10	8	7
Selenium ( $\mu\text{g}/\text{d}$ )	6	6	5	4	3	7	4	3	4	6	8	5	3	1	0
Iron (mg/d)	2	2	1	0	0	2	1	1	1	1	3	1	0	0	0
Calcium (mg/d)	31	22	17	13	11	11	15	18	21	31	22	20	19	16	14
Potassium (mg/d)	86	67	55	44	30	68	62	56	53	51	78	61	49	37	23
Phosphorus (mg/d)	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Magnesium (mg/d)	37	24	16	9	4	25	21	18	15	16	30	19	13	9	4
Chromium ( $\mu\text{g}/\text{d}$ )	3	3	3	1	1	4	3	2	1	2	4	2	1	1	0
Vitamin B <sub>1</sub> (mg/d)	7	5	4	2	1	6	3	2	3	4	7	4	2	1	0
Vitamin B <sub>2</sub> (mg/d)	4	3	2	1	1	2	2	1	2	4	3	2	2	1	0
Vitamin B <sub>3</sub> (mg/d)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Vitamin B <sub>6</sub> (mg/d)	3	2	2	0	0	3	1	1	1	1	3	1	1	0	0
Vitamin B <sub>12</sub> ( $\mu\text{g}/\text{d}$ )	1	1	1	1	1	1	0	1	1	2	1	1	1	1	0
Vitamin C (mg/d)	4	2	2	0	0	4	2	1	1	1	4	1	1	0	0
Vitamin A ( $\mu\text{g}/\text{d}$ )	15	7	4	1	0	8	6	5	5	5	10	6	4	2	1
Vitamin D ( $\mu\text{g}/\text{d}$ )	98	98	98	97	96	98	98	98	97	96	99	98	97	96	95
Vitamin E (mg/d)	96	95	94	92	90	98	97	95	92	86	95	94	93	91	91
Folic acid ( $\mu\text{g}/\text{d}$ )	11	7	6	3	2	8	6	5	6	7	9	6	5	4	2

\* Calculated from Mediterranean diet score proposed by Trichopoulou et al. (31).