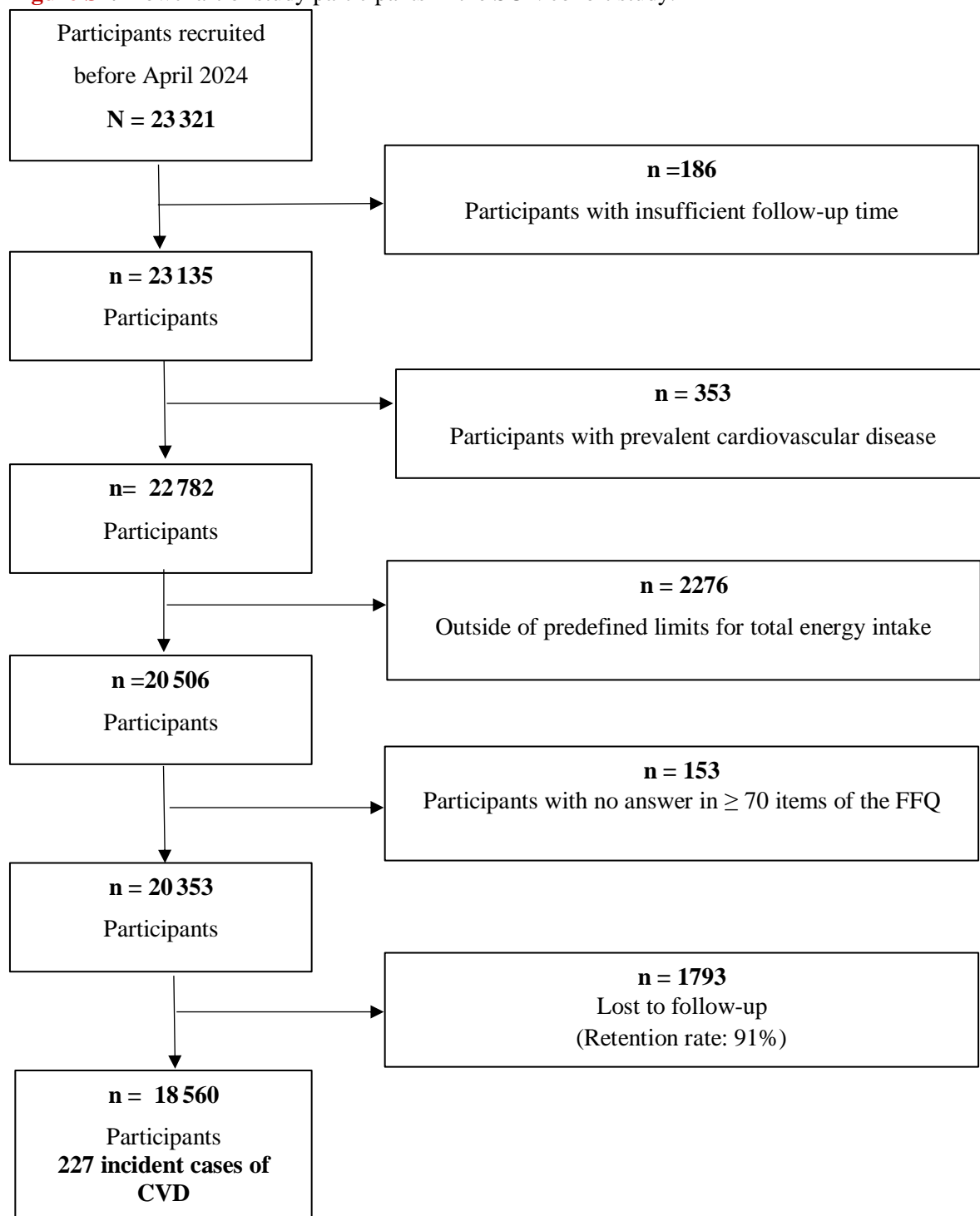


The type of provegetarian food pattern modifies long-term cardiovascular risk in young individuals

Supplementary data

Figure S1. Flowchart of study participants in the SUN cohort study.



CVD, cardiovascular disease.

Table S1

Food groups included in the provegetarian (PVG) food pattern and scoring criteria for each food pattern (PVG, healthful PVG, and unhealthy PVG)

Plant food groups	Foods included in each food group	PVG	hPVG	uPVG
<i>Healthy</i>				
1.Vegetables	Swiss chard, spinach, cabbage, cauliflower, broccoli, lettuce, chicory, tomatoes, carrot, pumpkin, green beans, eggplant, zucchini, cucumber, pepper, asparagus, others	+	+	-
2.Fruits	Citrus, grapes, banana, apple, pear, strawberry, peach, apricot, nectarine, cherries, plums, figs, melon, watermelon, grapes, mango, papaya, kiwi, olives, avocado	+	+	-
3.Legumes	Lentils, chickpeas, beans, peas	+	+	-
4.Nuts	Almonds, peanuts, hazelnuts, walnuts	+	+	-
5.Olive oil	Olive oil	+	+	-
6.Whole grains	Whole-grain bread	+	+	-
7.Boiled or baked potatoes	Boiled or baked potatoes	+	+	-
8.Coffee	Coffee, decaffeinated coffee	+	+	-
<i>Unhealthy</i>				
9.Refined grains	White bread, cold breakfast cereal, rice, pasta	+	-	+
10.French fries	Potato chips, French fries	+	-	+
11.Sugar-sweetened beverages	Carbonated beverages with sugar, low calorie carbonated beverages	+	-	+
12.Fruit juices	Fresh orange juice, other natural fruit juices and bottled fruit or vegetable juices	+	-	+

13.Pastries	Cookies, home-baked and ready-made cakes, muffins, donuts, croissant, cakes, churros, chocolates, nougat, marzipan	+	-	+
Animal food groups		PVG	hPVG	uPVG
14.Dairy products	Skimmed milk, semi-skimmed milk, whole milk, condensed milk, cream, whole fat yogurt, low fat yogurt, ice cream, milkshakes, curd, cottage or white cheese, cheese in portions, custard, curd	-	-	-
15.Meat and meat products	Chicken, turkey beef, veal, pork, lamb, liver, other viscera, serrano ham, cooked ham, spicy pork sausage, salami, mortadella, foie gras, black pudding, hamburger, other cured or smoked meats, bacon, hot dog	-	-	-
16.Fish or seafood	White fish, oily fish, salted or smoked fish, clams, mussels, shrimp, squid, octopus	-	-	-
17.Eggs	Eggs	-	-	-
18.Animal fats	Butter, lard	-	-	-
19.Miscellaneous food	Instant soups, mayonnaise, croquettes, pasties	-	-	-

hPVG, healthful provegetarian; PVG, provegetarian; uPVG: unhealthful provegetarian; +: positive score; -: reverse score.

Table S2

Macronutrient intake and food consumption of participants according to quartiles (Q) of the provegetarian (PVG), healthful provegetarian (hPVG), and unhealthy provegetarian (uPVG) food patterns in the SUN Project

Variables	PVG			hPVG			uPVG		
	Q1	Q2-Q3	Q4	Q1	Q2-Q3	Q4	Q1	Q2-Q3	Q4
N	5268	8818	4474	5159	9293	4108	5123	9372	4065
Provegetarian score range	29-53	54-61	62-80	33-52	53-62	63-87	31-52	53-62	63-86
Macronutrients (% E)									
Carbohydrate intake (%E)	40.8 (7.2)	43.6 (7.0)	46.8 (6.7)	42.8 (6.5)	43.3 (7.3)	45.1 (8.0)	41.3 (7.2)	43.6 (7.0)	46.5 (7.0)
Protein intake (%E)	18.8 (3.3)	18.2 (3.0)	17.0 (2.7)	18.2 (2.9)	18.3 (3.2)	17.6 (3.1)	20.0 (3.0)	18.0 (2.8)	15.9 (2.4)
Fat intake (%E)	38.5 (6.4)	36.2 (6.2)	34.2 (6.1)	37.5 (5.7)	36.4 (6.4)	35.1 (7.2)	36.7 (6.5)	36.4 (6.5)	35.8 (6.5)
SFA (%E)	14.3 (3.2)	12.4 (2.8)	10.7 (2.6)	13.9 (2.9)	12.5 (3.0)	10.7 (3.0)	12.2 (3.1)	12.6 (3.1)	12.7 (3.2)
MUFA (%E)	16.3 (3.5)	15.7 (3.6)	15.4 (3.7)	15.6 (3.0)	15.8 (3.7)	16.0 (4.2)	16.4 (3.7)	15.8 (3.6)	15.1 (3.4)
PUFA (%E)	5.4 (1.7)	5.2 (1.5)	5.1 (1.5)	5.5 (1.5)	5.2 (1.5)	5.1 (1.6)	5.0 (1.3)	5.2 (1.5)	5.5 (1.8)
Trans fatty acid (%E)	0.4 (0.2)	0.4 (0.2)	0.3 (0.2)	0.4 (0.2)	0.4 (0.2)	0.3 (0.2)	0.3 (0.2)	0.4 (0.2)	0.4 (0.2)
Total dietary fiber (g/d)	21.5 (9.4)	23.4 (10.1)	27.0 (11.0)	18.0 (6.4)	22.8 (8.2)	32.8 (12.3)	25.8 (10.4)	23.1 (10.2)	22.5 (9.9)
Food consumption									
Plant- based food groups									
Vegetables (g/d)	482 (330)	545 (359)	638 (355)	384 (223)	542 (307)	774 (456)	680 (351)	534 (346)	420 (321)
Fruits (g/d)	365 (328)	427 (331)	520 (360)	283 (199)	415 (291)	657 (456)	496 (315)	423 (343)	372 (359)
Legumes (g/d)	23 (21)	23 (18)	26 (17)	19 (13)	24 (18)	29 (24)	27 (19)	23 (18)	21 (19)

Nuts (g/d)	6 (12)	8 (13)	11 (15)	4 (6)	7 (11)	16 (21)	10 (15)	8 (13)	6 (11)
Olive oil (g/d)	18 (16)	19 (15)	22 (15)	14 (12)	19 (15)	26 (17)	21 (15)	19 (16)	18 (16)
Whole grains (g/d)	9 (32)	14 (33)	20 (35)	4.6 (15)	12 (29)	31 (48)	22 (38)	13 (32)	7.2 (26)
Refined grains (g/d)	99 (80)	92 (70)	92 (62)	100 (68)	93 (72)	88 (73)	64 (47)	92 (64)	135 (90)
Boiled or baked potatoes (g/d)	24 (28)	29 (30)	36 (34)	22 (24)	29 (29)	39 (39)	34 (31)	29 (32)	25 (28)
French fries (g/d)	30 (35)	26 (30)	25 (28)	37 (34)	26 (30)	18 (26)	15 (19)	26 (28)	45 (40)
Coffee (servings/d)	1.3 (1.3)	1.5 (1.3)	1.7 (1.3)	1.2 (1.2)	1.5 (1.3)	1.8 (1.4)	1.7 (1.3)	1.4 (1.3)	1.2 (1.3)
Sugar sweetened beverages (servings/d)	0.3 (0.7)	0.3 (0.6)	0.3 (0.6)	0.5 (0.7)	0.3 (0.6)	0.2 (0.5)	0.2 (0.5)	0.3 (0.6)	0.5 (0.8)
Fruit juices (servings/d)	0.4 (0.6)	0.5 (0.7)	0.6 (0.7)	0.5 (0.6)	0.4 (0.6)	0.5 (0.8)	0.3 (0.4)	0.5 (0.6)	0.6 (0.8)
Pastries (g/d)	61 (55)	52 (46)	48 (40)	66 (48)	52 (48)	42 (43)	31 (26)	51 (39)	87 (65)
Animal food groups									
Dairy products (g/d)	558 (300)	427 (243)	323 (202)	478 (255)	432 (266)	406 (273)	446 (262)	437 (268)	434 (266)
Meat and meat products (g/d)	230 (89)	178 (69)	139 (63)	207 (79)	181 (79)	158 (81)	182 (78)	182 (82)	188 (84)
Fish or seafood (g/d)	110 (71)	100 (57)	92 (58)	94 (54)	100 (61)	111 (71)	122 (63)	99 (63)	80 (48)
Eggs (g/d)	30 (20)	23 (14)	18 (12)	28 (18)	23 (15)	20 (14)	25 (15)	24 (17)	23 (17)
Animal fats (g/d)	1.7 (3.5)	1.0 (2.5)	0.6 (1.8)	1.7 (3.2)	1.0 (2.7)	0.6 (2.1)	1.1 (2.6)	1.1 (2.7)	1.1 (3.0)
Miscellaneous food* (g/d)	50 (58)	33 (39)	23 (31)	49 (48)	34 (46)	22 (31)	32 (39)	36 (46)	39 (38)

PVG, provegetarian; hPVG, healthful provegetarian; uPVG, unhealthful provegetarian; SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; %E: % of total energy intake.
 *Miscellaneous foods: croquettes, pasties, instant soups and mayonnaise.

Table S3

Pearson correlation coefficients between each provegetarian (PVG) food pattern and Mediterranean diet

	MedDiet	PVG	hPVG	uPVG
MedDiet	1.00			
PVG	0.40	1.00		
hPVG	0.54	0.57	1.00	
uPVG	-0.29	-0.07	-0.49	1.00

hPVG, healthful provegetarian; PVG, provegetarian; uPVG, unhealthful provegetarian.

$P < 0.05$ for all correlation coefficients