SUPPLEMENTARY DATA

Description of APDQS and its change between Y0 and Y20 in terms of levels and change in food group intake (serving/day).

The mean total food intake (serving/day) was about 40 at both Y0 and Y20, independently of whether the participant was part of the "high initial and increased" or "low initial and decreased" group (Supplemental Table S1). In general, compared to the "low initial and decreased" group, the "high initial and increased" group reported more servings at Y0 of beneficially-rated plant foods (9.24 vs. 7.37), coffee/tea (2.07 vs. 1.05), and low-fat dairy (1.45 vs. 0.79). They also consumed fewer servings of adversely-rated plant foods (2.73 vs. 3.97), high-fat meats (7.24 vs. 9.95), soft drinks (0.7 vs. 2.24), and whole-fat dairy (5.05 vs. 7.46). After 20 years of follow-up, compared with the "low initial and decreased" group, the "high initial and increased" group showed more desirable change in consumption of beneficially-rated plant foods by 9.23 serving/day, whereas consumption of adversely-rated meat products decreased by 3.3 serving/day. Supplemental Table S2 further elaborates on how the change in APDQS were achieved during a 20−year period and what was the noticeable difference between two groups. Over 20 years, the difference in beneficially-rated (difference: +1.87 serving/day at Y0 and +11.66 serving/day at Y20) and adversely-rated plant foods (difference: -1.25 serving/day at Y0 and -3.03 serving/day at Y20) increased considerably between the two groups, with little change in other foods.

Supplemental Table S1. Characteristics (Y0) of the participants included and excluded from the analysis

Characteristics at Y0	Excluded (n=2,580)	Included (n=2,534)
APDQS*	61.1±12.6	64.2±13.2
Age, y	24.6±3.7	25.1±3.6
Female, No. (%)	1318 (51.1)	1469 (58)
white race, No. (%)	1022 (39.6)	1455 (57.4)
Highest grade of education, y	14.6±2.5	16±2.6
Parental history of diabetes, No. (%)	749 (29)	639 (25.2)
Physical activity, EU†	418.4±307.1	421.9±294.1
Current smoker, No. (%)	942 (37)	604 (23.8)
Alcohol intake, drinks/d	1.0±2.0	0.8±1.2
Total energy intake, kcal/d	2943.3±1402.2	2698.3±1254
BMI, kg/m^2	25.1±5.6	23.9±4.4
WC, cm	79.1±12.3	76.3±10.2
Weight, kg	72.9±17.6	69.3±14.6
Type 2 diabetes cases (Y0−Y30), No. (%)	502 (19.5)	206 (8.1)

Abbreviation: APDQS, A Priori Diet Quality Score.

Values are reported as the mean± SD, unless noted as No. (percentage).

*Total score sums the 46 components (possible scores 0 to 132, with a range of 35−95 in this data), with higher scores representing a healthy, nutritionally rich plant-based diet. A 1−point increment represents a 1−category shift in the presumed favorable direction.

†Exercise units, physical activity score derived from the CARDIA physical activity history.

Supplemental Table S2. Y0 and Y20 mean intake (serving/day) of 46 individual food groups, sorted by APDQS rating and major food subgroups within each rating group and comparing two extreme groups of participants who represent "low initial and decreased" diet or "high initial and increased" diet

	Y0 mean intake		Y20 mean intake	
	Low initial and decreased*	High initial and increased†	Low initial and decreased*	High initial and increased†
Food group (serving/day)	**n=126**	**n=112**	**n=126**	**n=112**
Beneficially-rated				
Plant food				
1. Fruit	1.10	1.60	0.74	2.35
2. Avocado	0.01	0.13	0.01	0.36
3. Beans/Legumes	0.32	0.16	0.16	0.40
4. Green vegetables	0.16	0.45	0.24	1.50
5. Yellow vegetables	0.13	0.40	0.08	0.47
6. Tomatoes	0.44	0.58	0.32	0.90
7. Other vegetables	1.86	2.15	1.37	3.08
8. Nuts and seeds	0.66	0.63	0.53	2.19
9. Soy products	0.19	0.16	0.21	1.05
10. Whole grains	1.25	1.52	0.92	2.13
11. Vegetable oil	1.26	1.47	2.24	4.04
Subtotal	7.37	9.24	6.81	18.47
Meat products				
12. Fish	0.06	0.03	0.01	0.06
13. Lean fish	0.81	0.77	0.44	1.04
14. Poultry	1.36	1.26	1.27	1.57
Subtotal	2.24	2.06	1.72	2.66
Alcohol				
15. Moderate amounts of beer	0.73	0.55	0.25	0.28
16. Moderate amounts of wine	0.08	0.27	0.05	0.73
17. Moderate amounts of liquor	0.27	0.22	0.10	0.26
Subtotal	1.08	1.04	0.41	1.27
Other non-dairy beverages				
18. Coffee	0.54	1.43	0.68	1.98
19. Tea	0.50	0.64	0.61	1.08
Subtotal	1.05	2.07	1.29	3.07
Dairy				
20. Low-fat milk/Cheese/Yogurt	0.79	1.45	0.87	1.76
Subtotal	0.79	1.45	0.87	1.76
Beneficially-rated total	12.52	15.85	11.10	27.23
Neutrally-rated				
Plant food				
1. Potatoes	0.62	0.37	0.32	0.22
2. Refined grains	5.48	3.62	4.75	2.32
3. Margarine	1.70	1.47	1.01	0.83
4. Chocolate	0.25	0.19	0.26	0.17
5. Meal replacements	0.03	0.01	0.11	0.05
6. Pickled foods	0.37	0.46	0.33	0.63
7. Sugar substitutes	0.01	0.09	0.11	0.83

Subtotal	8.45	6.21	6.88	5.06
Meat Products				
8. Lean meats	0.91	0.72	0.30	0.48
9.Shellfish	0.16	0.25	0.15	0.38
10. Eggs	0.80	0.44	0.64	0.52
11. Soups	0.04	0.05	0.03	0.08
Subtotal	1.91	1.46	1.12	1.46
Other non-dairy beverages				
12. Diet drinks	0.30	0.65	0.38	0.63
13. Fruit juices	1.65	1.75	1.01	0.72
Subtotal	1.95	2.40	1.39	1.35
Neutrally-rated total	12.31	10.07	9.39	7.87
Adversely-rated				
Plant food				
1. Fried potatoes	0.35	0.24	0.36	0.08
2. Grain dessert	0.79	0.54	1.25	0.29
3. Salty snacks	0.02	0.03	0.24	0.17
4. Pastries	0.97	0.73	1.10	0.39
5. Sweets	1.84	1.19	2.23	1.22
Subtotal	3.97	2.73	5.18	2.15
Meat Products				
6. High-fat meats	3.11	1.98	2.32	0.90
7. Processed meats	1.13	0.54	1.37	0.50
8. Organ meats	0.04	0.04	0.06	0.01
9. Fried fish/Poultry	0.07	0.12	0.42	0.04
10. Sauces	5.59	4.56	2.56	2.50
Subtotal	9.95	7.24	6.73	3.94
Other non-dairy beverages				
11. Soft drink	2.24	0.70	2.47	0.18
Subtotal	2.24	0.70	2.47	0.18
Dairy				
12. Whole-fat milk/Cheese/Yogurt	1.96	1.70	1.55	0.83
13. Butter	5.51	3.34	2.88	1.31
Subtotal	7.46	5.05	4.44	2.14
Adversely-rated total	23.63	15.71	18.82	8.41
Grand total	48.46	41.63	39.32	43.52

[*]"Low initial and decreasing" was defined as below the median Y0 APDQS and quintile 1 of 20−year change.

[†]"High initial and increased" was defined as at or above the median Y0 APDQS and quintile 5 of 20−year change.

Supplemental Table S3. Characterization of foods eaten in high vs low APDQS: Mean difference in food intake (serving/day), comparing "high initial and increased" group vs. "low initial and decreased"[*] summarized into five general food groups within APDQS rating categories[†]

	Plant food			Meat products			Alcohol			Other non-dairy beverages			Dairy		
	LD (I)	HI (II)	diff (II–I)	LD (I)	HI (II)	diff (II–I)	LD (I)	HI (II)	diff (II–I)	LD (I)	HI (II)	diff (II–I)	LD (I)	HI (II)	diff (II–I)
Beneficially-rated															
Y0	7.37	9.24	1.87	2.24	2.06	-0.18	1.08	1.04	-0.04	1.05	2.07	1.02	0.79	1.45	0.66
Y20	6.81	18.47	11.66	1.72	2.66	0.94	0.41	1.27	0.87	1.29	3.07	1.78	0.87	1.76	0.89
Neutrally-rated															
Y0	8.45	6.21	-2.24	1.91	1.46	-0.45	NA	NA	NA	1.95	2.40	0.46	NA	NA	NA
Y20	6.88	5.06	-1.82	1.12	1.46	0.34	NA	NA	NA	1.39	1.35	-0.04	NA	NA	NA
Adversely-rated															
Y0	3.97	2.73	-1.25	9.95	7.24	-2.71	NA	NA	NA	2.24	0.70	-1.55	7.46	5.05	-2.42
Y20	5.18	2.15	-3.03	6.73	3.94	-2.79	NA	NA	NA	2.47	0.18	-2.29	4.44	2.14	-2.30

Abbreviation: LD, low initial and decreased; HI, high initial and increased; NA, not applicable.

[*]"Low initial and decreasing" was defined as below the median Y0 APDQS and quintile 1 of 20–year change; "high initial and increased" was defined as at or above the median Y0 APDQS and quintile 5 of 20–year change.

[†]Using the subtotal statistics presented in Supplemental Table S2 for each exam (column I for LD and column II for HI), the mean difference between the extreme APDQS food score categories is serving/day in column II – serving/day in column I for five general food categories.

Supplemental Table S4. APDQS food groups and its constituent subgroups

1. Fruit	Vegetable-based savory snack	Loaf-type bread and plain rolls - whole grain
Citrus fruit	**8. Nuts and seeds**	Crackers - whole grain
Fruit excluding citrus fruit	Nuts and seeds	Pasta - whole grain
Fried fruits	Nut and seed butters	Ready-to-eat cereal (not presweetened) - whole grain
Fruit-based savory snack	**9. Soy products**	Ready-to-eat cereal (presweetened) - whole grain
2. Avocado	Meat alternatives	Popcorn
Avocado/guacamole and similar	Milk – nondairy	Flavored popcorn
3. Beans/Legumes	Cheese – nondairy	Snack bars - some whole grain
Legumes (cooked dried beans)	Yogurt – nondairy	Snack bars - whole grain
4. Green vegetables	Frozen nondairy dessert	**11. Vegetable oil**
Dark-green vegetables	Cream – nondairy	Oil
5. Yellow vegetables	**10. Whole grains**	Fried vegetables
Deep-yellow vegetables	Grains, flour and dry mixes - some whole grain	**12. Fish**
6. Tomatoes	Loaf-type bread and plain rolls - some whole grain	Fish - fresh and smoked
Tomato	Crackers - some whole grain	**13. Lean fish**
7. Other vegetables	Pasta - some whole grain	Lean fish - fresh and smoked
Other starchy vegetables	Ready-to-eat cereal (not presweetened) - some whole grain	**14. Poultry**
Other vegetables	Ready-to-eat cereal (presweetened) - whole grain	Poultry
Fried vegetables	Grains, flour and dry mixes - whole grain	Lean poultry
15. Moderate amounts of beer	Artificially sweetened tea	Cheese - reduced fat

Beer and ales	Unsweetened tea	Cheese - low fat and fat free
16. Moderate amounts of wine	Nondairy-based artificially sweetened meal replacement/supplement	**21. Potatoes**
Wine	**20. Low-fat milk/Cheese/Yogurt**	White potatoes
17. Moderate amounts of liquor	Yogurt - sweetened low fat	**22. Refined grains**
Cordial and liqueur	Yogurt - sweetened fat free	Ready-to-eat cereal (not presweetened) - refined grain
Distilled liquor	Yogurt - artificially sweetened low fat	Ready-to-eat cereal (presweetened) - refined grain
18. Coffee	Yogurt - artificially sweetened fat free	Crackers - refined grain
Sweetened coffee	Milk - reduced fat	Pasta - refined grain
Artificially sweetened coffee	Milk - low fat and fat free	Grains, flour and dry mixes - refined grain
Unsweetened coffee	Ready-to-drink flavored milk - reduced fat	Loaf-type bread and plain rolls - refined grain
Sweetened coffee substitutes	Ready-to-drink flavored milk - low fat and fat free	Snack bars - refined grain
Artificially sweetened coffee substitutes	Sweetened flavored milk beverage powder with non-fat dry milk	**23. Margarine**
Unsweetened coffee substitutes	Artificially sweetened flavored milk beverage powder with non-fat dry milk	Margarine - regular
19. Tea	Cream - reduced fat	Margarine - reduced fat
Sweetened tea	Cream - low fat and fat free	**24. Chocolate**

Chocolate candy	Shellfish	Cakes, cookies, pies, pastries, danish, doughnuts and cobblers - some whole grain
25. Meal replacements	**30. Eggs**	Cakes, cookies, pies, pastries, danish, doughnuts and cobblers - refined grain
Dairy-based sweetened meal replacement/supplement	Eggs	Miscellaneous dessert
Dairy-based artificially sweetened meal replacement/supplement	Egg substitute	**36. Salty snacks**
Nondairy-based sweetened meal replacement/supplement	**31. Soups**	Snack chips - whole grain
Nondairy-based artificially sweetened meal replacement/supplement	Soup broth	Snack chips - some whole grain
Nondairy-based unsweetened meal replacement/supplement	**32. Diet drinks**	Snack chips - refined grain
26. Pickled foods	Artificially sweetened soft drinks	**37. Pastries**
Pickled foods	Unsweetened soft drinks	Other breads (quick breads, corn muffins, tortillas) - whole grain
27. Sugar substitutes	Artificially sweetened water	Other breads (quick breads, corn muffins, tortillas) - some whole grain
Sugar substitute	Artificially sweetened fruit drinks	Other breads (quick breads, corn muffins, tortillas) - refined grain
28. Lean meats	**33. Fruit juices**	**38. Sweets**
Beef	Citrus juice	Sugar
Veal	Fruit juice excluding citrus juice	Syrup, honey, jam, jelly, preserves
Lamb	**34. Fried potatoes**	Non-chocolate candy
Cured pork	Fried potatoes	Frosting or glaze
Fresh pork	**35. Grain dessert**	**39. High-fat meats**
29. Shellfish	Cakes, cookies, pies, pastries, danish, doughnuts and cobblers - whole grain	Lean fresh pork

Lean lamb	Sauces, sweet – regular	Ready-to-drink flavored milk – whole
Lean cured pork	Sauces, sweet - reduced fat/reduced calorie/fat free	Sweetened flavored milk beverage powder without non-fat dry milk
Game	Sauces and condiments - regular	Artificially sweetened flavored milk beverage powder without non-fat dry milk
Lean veal	Sauces and condiments - reduced fat	Cheese - full fat
Lean beef	**44. Soft drink**	**46. Butter**
40. Processed meats	Sweetened soft drinks	Butter and other animal fats – regular
Cold cuts and sausage	Sweetened water	Butter and other animal fats - reduced fat
Lean cold cuts and sausage	Sweetened fruit drinks	Shortening
Meat-based savory snack	Non-alcoholic beer	
41. Organ meats	Non-alcoholic light beer	
Organ meats	**45. Whole-fat milk/Cheese/Yogurt**	
42. Fried fish/Poultry	Yogurt - sweetened whole milk	
Fried chicken - commercial entrée and fast food	Yogurt - artificially sweetened whole milk	
Fried fish - commercial entrée and fast food	Frozen dairy dessert	
Fried shellfish - commercial entrée and fast food	Pudding and other dairy dessert	
43. Sauces	Artificially sweetened pudding and other dairy dessert	
Salad dressing – regular	Cream	
Salad dressing - reduced fat/reduced calorie/fat free	Milk – whole	

Supplemental Table S5. HR (95% CI) of incident type 2 diabetes quintile of 7–year change, Y0, or Y20 APDQS (n=3,541)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Each 1−SD (13−point) increment*	P for Trend
Joint predictor model (both APDQS variables in one model)¶							
7–year change in APDQS predicting type 2 diabetes in the subsequent 23 years							
Range	< -5	-5 to 0	1 to 5	6 to 12	≥ 13		
no. of cases/ N at risk (unadjusted cumulative incidence rate)	114/695 (16.4)	88/683 (12.9)	86/708 (12.2)	112/783 (14.3)	92/672 (13.7)		
Model 1: Basic model†	1.50 (1.13−1.99)	1 (ref)	0.88 (0.65−1.18)	1.02 (0.77−1.35)	0.89 (0.66−1.21)	0.81 (0.72−0.92)	0.001
Model 2: Full-adjusted model‡	1.39 (1.04−1.84)	1 (ref)	0.89 (0.66−1.20)	1.01 (0.76−1.35)	0.98 (0.72−1.33)	0.87 (0.76−0.99)	0.035
Y0 APDQS predicting type 2 diabetes in the subsequent 23 years, after a 7–year lag							
Range	< 53	53 to 59	60 to 66	67 to 75	≥ 76		
no. of cases/ N at risk (unadjusted cumulative incidence rate)	139/737 (18.9)	113/677 (16.7)	105/727 (14.4)	71/693 (10.3)	64/707 (9.1)		
Model 1: Basic model†	1 (ref)	0.86 (0.67−1.11)	0.73 (0.55−0.95)	0.53 (0.39−0.73)	0.47 (0.33−0.69)	0.74 (0.65−0.84)	< 0.001
Model 2: Full-adjusted model‡	1 (ref)	0.88 (0.68−1.14)	0.78 (0.59−1.03)	0.62 (0.45−0.86)	0.66 (0.45−0.97)	0.82 (0.72−0.94)	0.004
Single predictor (Y7 APDQS) models							
Y7 predicting type 2 diabetes over 23 years							
Range	< 57	57 to 63	64 to 70	71 to 78	≥ 79		
no. of cases/ N at risk (unadjusted cumulative incidence rate)	146/728 (20.1)	113/697 (16.2)	100/702 (14.3)	81/731 (11.1)	52/683 (7.6)		
Model 1: Basic model§	1 (ref)	0.83 (0.65−1.06)	0.76 (0.58−0.98)	0.63 (0.48−0.84)	0.47 (0.34−0.67)	0.77 (0.69−0.86)	< 0.001
Model 2: Full-adjusted model‖	1 (ref)	0.90 (0.70−1.15)	0.86 (0.66−1.11)	0.73 (0.55−0.98)	0.65 (0.46−0.93)	0.85 (0.75−0.95)	0.005

Abbreviations: CI, confidence interval; HR, hazard ratio.

[*]A 1−point increment represents a 1−category shift in the presumed favorable direction.
[†]Model 1: Y0 APDQS and 7−year change in APDQS were fitted simultaneously in the model. Covariates included age (Y0), sex, race (white, black), and total energy intake (Y0 and 7−year change).
[‡]Model 2: Model 1 + parental history of diabetes (yes or no), physical activity level (Y0 and 7−year change; tertiles), smoking status (Y0; never, former, and current), highest grade of education achieved during follow-up, and BMI (Y0 and 7−year change).
[§]Model 1: Age (Y7), sex, race (white, black), and total energy intake (Y7).
[‖]Model 2: Model 1 + parental history of diabetes (yes or no), physical activity level (Y7; tertiles), smoking status (Y7; never, former, and current), highest grade of education achieved during follow-up, and BMI (Y7).
[¶]P for interaction=0.43 was tested with the multiplicative term of 7−year change in APDQS (continuous) and Y0 APDQS (continuous) in Model 2

Supplemental Table S6. Subsequent 23−year HR (95% CI) of incident type 2 diabetes according to joint classification of Y0 APDQS and 7−year change in APDQS (n=3,541)

	7−year change in APDQS				
	Quintile 1	**Quintile 2**	**Quintile 3**	**Quintile 4**	**Quintile 5**
Below the median of Y0 APDQS (n=1,733)					
Range	< -5	-5 to 0	1 to 5	6 to 12	≥ 13
no. of cases/ N at risk (unadjusted cumulative incident rate)	36/149 (24.2)	52/278 (18.7)	59/361 (16.3)	78/439 (17.8)	78/506 (15.4)
Unadjusted	1.30 (0.85−1.99)	1 (ref)	0.85 (0.59−1.24)	0.95 (0.67−1.35)	0.80 (0.56−1.13)
Model 1: Basic model*	1.31 (0.85−2.00)	1 (ref)	0.87 (0.60−1.26)	0.99 (0.69−1.40)	0.91 (0.64−1.29)
Model 2: Full-adjusted model†	1.14 (0.74−1.75)	1 (ref)	0.86 (0.59−1.25)	0.91 (0.64−1.30)	0.94 (0.66−1.34)
At or above the median of Y0 APDQS (n=1,808)					
Range	< -5	-5 to 0	1 to 5	6 to 12	≥ 13
no. of cases/ N at risk (unadjusted cumulative incidence rate)	78/546 (14.3)	36/405 (8.9)	27/347 (7.8)	34/344 (9.9)	14/166 (8.4)
Unadjusted	0.70 (0.49−1.00)	0.44 (0.29−0.67)	0.38 (0.24−0.61)	0.49 (0.32−0.75)	0.41 (0.23−0.73)
Model 1: Basic model*	0.91 (0.63−1.31)	0.57 (0.37−0.88)	0.51 (0.32−0.82)	0.66 (0.42−1.03)	0.57 (0.31−1.04)
Model 2: Full-adjusted model†	0.99 (0.69−1.43)	0.63 (0.40−0.98)	0.59 (0.36−0.95)	0.79 (0.50−1.24)	0.71 (0.39−1.30)

Median cutpoint of Y0 APDQS was 63.

*Model 1: Age (Y0), sex, race (white, black), and total energy intake (Y0 and 7−year change).

†Model 2: Model 1 + parental history of diabetes (yes or no), physical activity level (Y0 and 7−year change; tertiles), smoking status (Y0; never, former, and current), highest grade of education achieved during follow-up, and BMI (Y0 and 7−year change).

Supplemental Table S7. The adjusted mean change[*] in BMI and WC according to 7−year change in the APDQS

Each 1−SD (13−point) increment	Concurrent 7−year change (Y0−Y7)			Subsequent 10−year change (Y7−Y30)		
	b	**SE**	**P-value**	***b***	**SE**	**P-value**
BMI, kg/m^2 (n=2,656)						
7−year change (Y0−7)[†]	-0.26	0.08	< 0.001	-0.22	0.13	0.08
Y0[†]	-0.36	0.08	< 0.001	-0.53	0.13	< 0.001
Y7[‡]	—	—	—	-0.36	0.11	0.001
WC, cm (n=2,643)						
7−year change (Y0−7)[†]	-0.80	0.20	< 0.001	-0.09	0.31	0.78
Y0[†]	-1.14	0.20	< 0.001	-0.92	0.30	0.002
Y7[‡]	—	—	—	-0.47	0.27	0.08
Weight, kg (n=2,657)						
7−year change (Y0−7)[†]	-0.71	0.22	0.001	-0.53	0.36	0.14
Y0[†]	-0.91	0.22	< 0.001	-1.34	0.36	< 0.001
Y7[‡]	—	—	—	-0.92	0.32	0.004

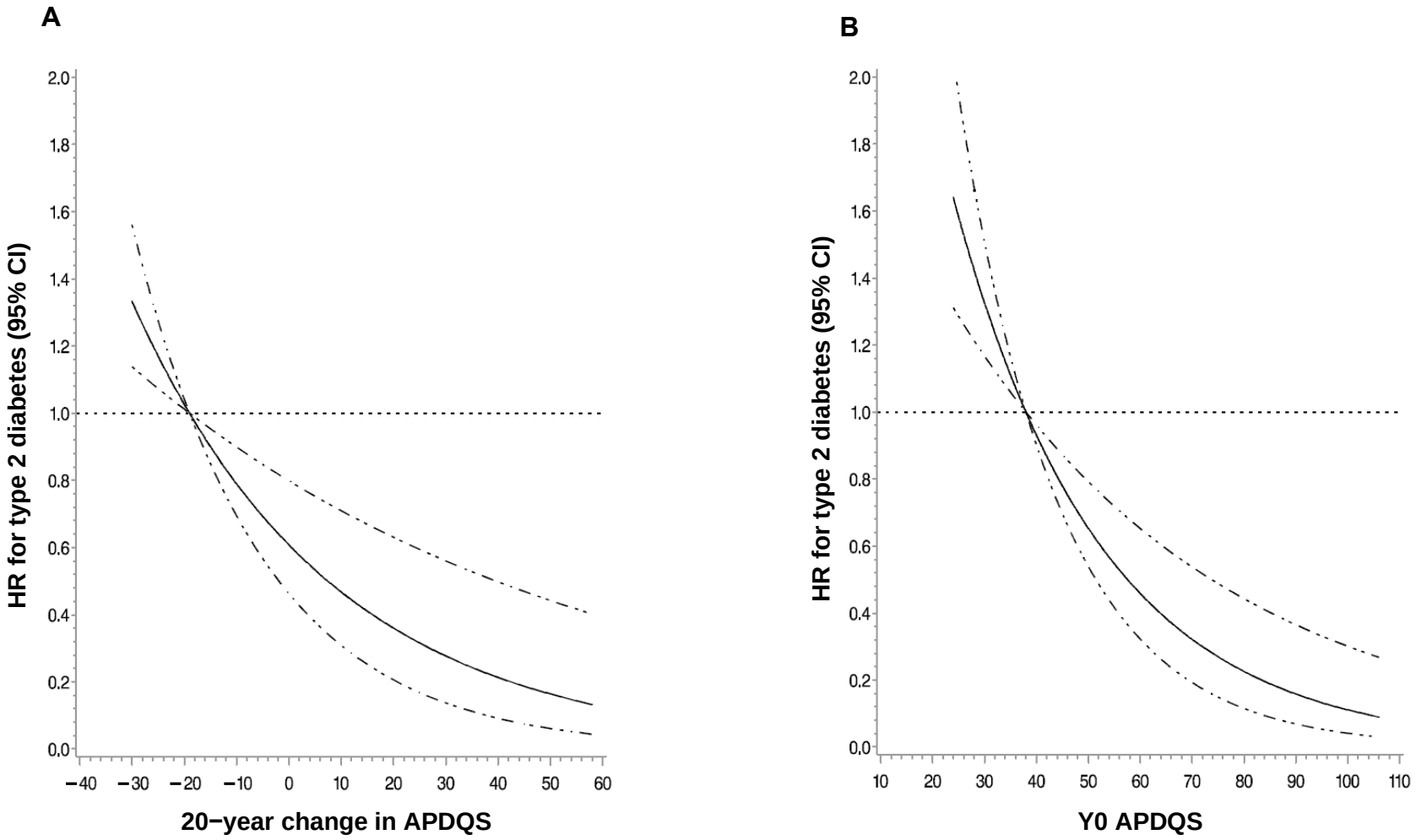
Abbreviations: CI, confidence interval; HR, hazard ratio; APDQS, A Priori Diet Quality Score; BMI, body mass index; WC, waist circumference.

[*]Multivariable linear models are reported. Model was adjusted for current age, sex, race (white and black), and total energy intake (Y0 and 7–year change), smoking status (Y0; never, former, and current), physical activity level (Y0 and 7–year change; tertiles), and highest grade of education achieved during follow-up.

[†]Joint predictor models. The four models (with dependent variables concurrent BMI, concurrent WC, subsequent BMI, and subsequent WC) each included Y0 APDQS and 7−year change in APDQS. Depending on outcome variables, the following variables were also included in the model: Y0 BMI for concurrent 7–year change in BMI; Y7 BMI for subsequent 23–year change in BMI; Y0 WC for concurrent 7–year change in WC; Y7 WC for subsequent 23–year change in WC.

[‡]Single predictor models.

Supplemental Figure S1. Restricted cubic splines for mutually adjusted Y0 APDQS and 20−year change in APDQS predicting subsequent 10−year type 2 diabetes risk.



Multivariable-adjusted HRs (95% CIs) were calculated using restricted cubic spline regression with 4 knots at APDQS cutpoints of 5th, 35th, 65th, and 95th percentiles. Y0 APDQS and 20−year change in APDQS were mutually adjusted. Other covariates included age (Y0), sex, race (white, black), total energy intake (Y0 and 20−year change), parental history of diabetes (yes or no), physical activity level (Y0 and 20−year change; tertiles), smoking status (Y0; never, former, and current), and highest grade of education achieved during follow-up. Solid lines represent HRs; dashed lines represent 95% CIs; HR of 1·0 is the reference. (A) P for nonlinearity=0.74, P for linearity<0·001 (B) P for nonlinearity=0.97, P for linearity<0·001. Nonlinearity was tested using likelihood ratio tests by comparing

two models, (a) model with the linear term and (b) the model with the linear and cubic spline terms in the Model 2. The tests for linearity were performed by comparing the linear model with the model including only the covariates using a likelihood ratio test. Abbreviations: CI, confidence interval; HR, hazard ratio, APDQS, A Priori Diet Quality Score.