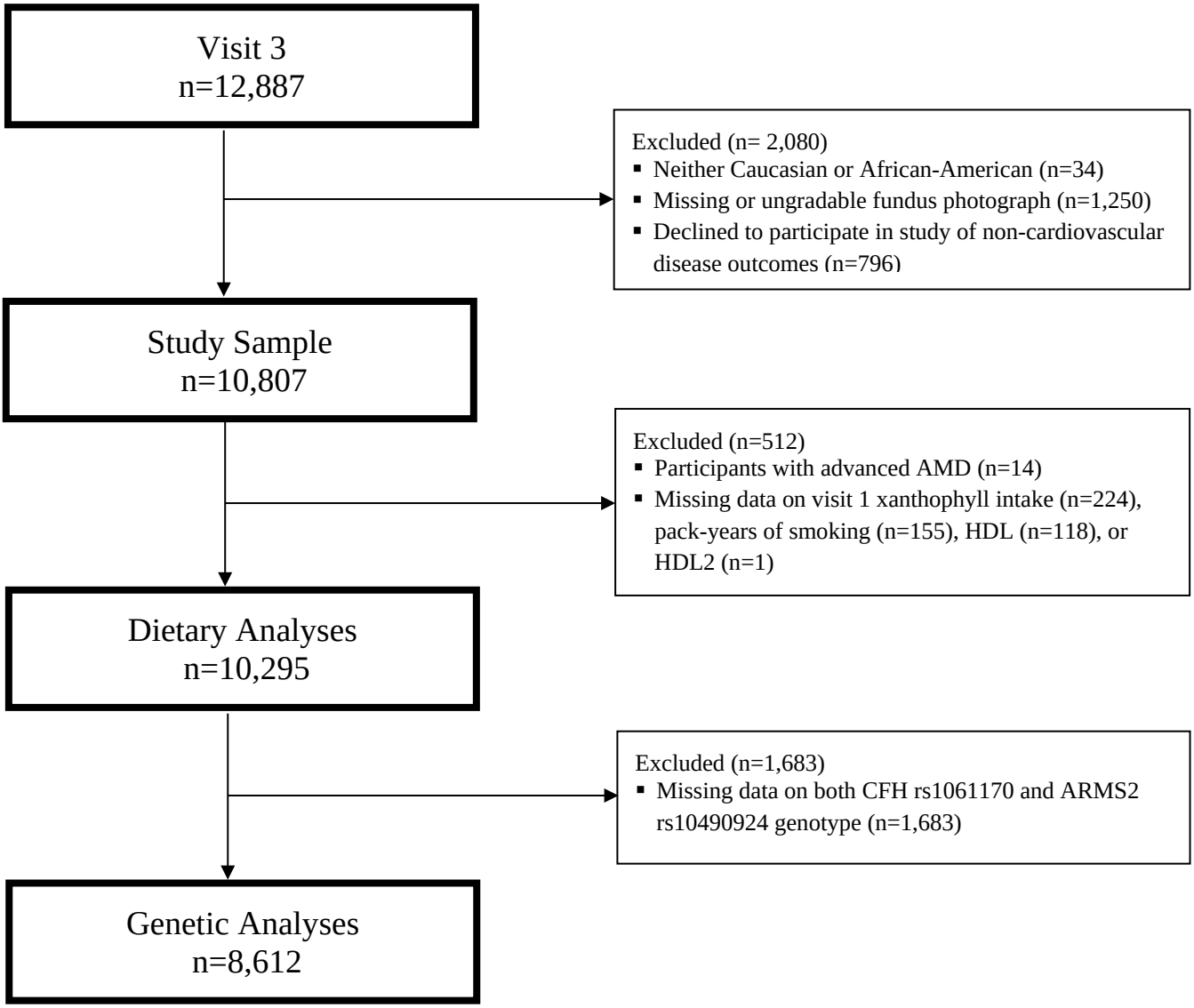
Supplemental Figure 1: Study sample selection.



Supplemental Table 1: Participant characteristics by prevalent early AMD status (n=10,295).*

	Total	***No***	***Yes***	***p-value***
	n (%)†	*n (%)*	*n (%)*	
DEMOGRAPHICS				
Age (mean±SEM)	53.9±0.1	53.7±0.1	56.0 ±0.2	<0.001
Sex				0.027
Men	4,662 (45)	4,395 (45)	267 (50)	
Women	5,633 (55)	5,365 (55)	268 (50)	
Race				0.008
African-American	2,038 (20)	1,956 (20)	82 (15)	
Caucasian	8,257 (80)	7,804 (80)	453 (85)	
Education				0.095
Missing Data (n)	10	10	0	
Basic (<11 years)	1,972 (19)	1,853 (19)	119 (22)	
Intermediate (12-16 years)	4,368 (43)	4,138 (42)	230 (43)	
Advanced (17-21 years)	3,945 (38)	3,759 (39)	186 (35)	
Household Income, Adjusted for Family Size┼				0.02
Missing Data (n)	337	318	19	
Tertile 1 (≤$17,350)	3,453 (35)	3,266 (35)	187 (36)	
Tertile 2 (>$17,350-$31,249)	3,322 (33)	3,130 (33)	192 (37)	
Tertile 3 (≥$31,250)	3,183 (32)	3,046 (32)	137 (27)	
Health Insurance				0.44
Missing Data (n)	11	11	0	
No	758 (7)	714 (7)	44 (8)	
Yes	9,526 (93)	9,035 (93)	491 (92)	
ARIC Field Center				0.005
Forsyth County, NC	2787 (27)	2,622 (27)	165 (31)	
Jackson, MS	1759 (17)	1,690 (17)	69 (13)	
Minneapolis, MN	3000 (29)	2,860 (29)	140 (26)	
Washington County, MD	2749 (27)	2,588 (27)	161 (30)	
HEALTH BEHAVIORS				
Cigarette Smoking Status				0.26
Never	4,534 (44)	4,312 (44)	222 (42)	
Former	3,419 (33)	3,224 (33)	195 (36)	
Current	2,342 (23)	2,224 (23)	118 (22)	
Pack-years (mean±SEM)	14.9±0.2	14.8±0.2	18.0±0.9	<0.001

	Total	*No*	*Yes*	*p-value*
	n (%)[†]	*n (%)*	*n (%)*	
Ethanol Intake (mean±SEM)	43.2±0.9	43.0±1.0	46.0±4.1	0.47
Missing Data (n)	36	31	5	
PHYSICAL EXAMINATION, PAST MEDICAL HISTORY, AND ANTHROPOMETRICS				
Hypertension (≥140/90 mmHg or use of antihypertensive medications)				0.017
Missing Data (n)	41	35	6	
No	7,050 (69)	6,711 (69)	339 (64)	
Yes	3,204 (31)	3,014 (31)	190 (36)	
BMI Category				0.50
Missing Data (n)	6	6	0	
Not Overweight or Obese <25	3,463 (34)	3,295 (34)	168 (31)	
Overweight (≥25 and <30)	4,147 (40)	3,927 (40)	220 (41)	
Obese (≥30)	2,679 (26)	2,532 (26)	147 (28)	
Prevalent Diabetes (fasting glucose ≥126; random glucose ≥200; use of diabetes medications)				
Missing Data (n)	18	18	0	0.78
No	9,294 (90)	8,812 (90)	482 (90)	
Yes	983 (10)	930 (10)	53 (10)	
Prevalent Congestive Heart Failure				0.29
Missing Data (n)	177	169	8	
No	9,708 (96)	9,207 (96)	501 (95)	
Yes	410 (4)	384 (4)	26 (5)	
Prevalent Myocardial Infarction				0.78
Missing Data (n)	132	127	5	
No	9,815 (97)	9,302 (97)	513 (97)	
Yes	348 (3)	331 (3)	17 (3)	
Prevalent Stroke				0.92
Missing Data (n)	23	22	1	
No	10,152 (99)	9,624 (99)	528 (99)	
Yes	120 (1)	114 (1)	6 (1)	
LIPID METABOLISM				
HDL (mean±SEM, mmol/L)	1.34±0.004	1.34±0.004	1.31±0.02	0.14
HDL Category, Median Split (mmol/L)				0.67
Low (<1.27 mmol/L)	5,122 (50)	4,851 (50)	271 (51)	
High (≥1.27 mmol/L)	5,173 (50)	4,909 (50)	264 (49)	
HDL2 (mean±SEM, mmol/L)	0.37±0.002	0.37±0.002	0.35±0.01	0.15
HDL2 Category, Median Split (mmol/L)				0.06

	Total	***No***	***Yes***	***p-value***
	n (%)[†]	*n (%)*	*n (%)*	
Low (<0.33 mmol/L)	5,039 (49)	4,756 (49)	283 (53)	
High (≥0.33 mmol/L)	5,256 (51)	5,004 (51)	252 (47)	
HDL3 (mean±SEM, mmol/L)	0.97±0.003	0.97±0.003	0.95±0.01	0.28
HDL3 Category, Median Split (mmol/L)				0.25
Low (<0.95 mmol/L)	5,198 (50)	4,915 (50)	283 (53)	
High (≥0.95 mmol/L)	5,097 (50)	4,845 (50)	252 (47)	
Apolipoprotein A1 (mean±SEM, µmol/L)	47.3±0.1	47.4±0.1	46.6±0.5	0.11
Apolipoprotein A1 Category, Median Split (µmol/L)				0.26
Low (<46.26 µmol/L)	5,103 (50)	4,825 (49)	278 (52)	
High (≥46.26 µmol/L)	5,192 (50)	4,935 (51)	257 (48)	
Apolipoprotein B (mean±SEM, µmol/L)	1.69±0.01	1.69±0.01	1.72±0.02	0.24
Missing Data (n)	2	1	1	
Apolipoprotein B Category, Median Split (µmol/L)				0.26
Missing Data (n)	2	1	1	
Low (<1.62 µmol/L)	5,121 (50)	4,868 (50)	253 (47)	
High (≥1.62 µmol/L)	5,172 (50)	4,891 (50)	281 (53)	
LDL (mean±SEM, mmol/L)	3.55±0.01	3.55±0.01	3.59±0.04	0.33
Missing Data (n)	144	136	8	
LDL Category, Median Split (mmol/L)				0.036
Missing Data (n)	144	136	8	
Low (<3.49 mmol/L)	5,074 (50)	4,834 (50)	240 (46)	
High (≥3.49 mmol/L)	5,077 (50)	4,790 (50)	287 (54)	
Triglycerides (mean±SEM, mmol/L)	1.48±0.01	1.48±0.01	1.49±0.04	0.78
Triglycerides Category, Median Split (mmol/L)				0.60
Low (<1.24 mmol/L)	5,117 (50)	4,857 (50)	260 (49)	
High (≥1.24 mmol/L)	5,178 (50)	4,903 (50)	275 (51)	
NUTRITIONAL AND DIETARY FACTORS				
Daily caloric intake (kcal)	1631±6	1631±6	1630±26	0.97
Daily carbohydrate intake (%kcal)	48.7±0.1	48.7±0.1	48.5±0.4	0.52
Daily protein intake (%kcal)	17.9±0.04	17.9±0.04	18.0±0.2	0.75
Daily total fat intake (%kcal)	33.0±0.1	33.0±0.1	33.0±0.3	0.85
Daily monounsaturated fat intake (%kcal)	12.65±0.03	12.65±0.03	12.69±0.13	0.76
Daily polyunsaturated fat intake (%kcal)	5.05±0.01	5.06±0.01	4.98±0.06	0.25
Daily omega-3 fatty acid intake (% kcal)	0.14±0.001	0.14±0.001	0.14±0.006	0.80
Daily zinc intake (mg/1000 kcal)	6.81±0.02	6.80±0.02	6.87±0.08	0.42

	Total	***No***	***Yes***	***p-value***
	n (%)[†]	*n (%)*	*n (%)*	
Daily copper intake (mg/1000 kcal)	0.85±0.002	0.85±0.002	0.85±0.009	0.85
Daily vitamin C intake (mg/1000 kcal)	77.1±0.4	77.0±0.4	78.4±1.9	0.48
Daily vitamin E intake (mg/1000 kcal)	3.06±0.02	3.06±0.02	3.02±0.07	0.54
Daily lycopene intake (µg/1000 kcal)	2119±26	2128±27	1950±115	0.13
Daily xanthophyll intake (µg/1000 kcal)	1683±17	1682±17	1682±73	>0.99
Daily α-carotene intake (µg/1000 kcal)	342±5	343±5	329±22	0.55
Daily β-carotene intake (µg/1000 kcal)	1699±16	1701±17	1661±72	0.59
Daily β-cryptoxanthin intake (µg/1000 kcal)	52.3±0.5	52.3±0.5	52.0±2.2	0.91
Daily total carotenoid intake (µg/1000 kcal)	4404±40	4409±42	4300±177	0.55
Visit 1 Diet Status				0.27
Missing Data (n)	5	5	0	
No	8,529 (83)	8,095 (83)	434 (81)	
Yes	1,761 (17)	1,660 (17)	101 (19)	
GENETICS				
***CFH* rs1061170 genotype**				
African-American				0.18
Missing Data (n)	168	163	5	
TT	552 (37)	529 (37)	23 (37)	
CT	772 (51)	744 (52)	28 (44)	
CC	179 (12)	167 (11)	12 (19)	
Caucasian				<0.001
TT	2906 (42)	2793 (42)	113 (31)	
CT	3131 (45)	2961 (45)	170 (47)	
CC	904 (13)	822 (13)	82 (22)	
***ARMS2*, rs10490924 genotype**				
African-American				0.24
Missing Data (n)	6	6	0	
GG	983 (59)	942 (59)	41 (60)	
GT	583 (35)	563 (35)	20 (29)	
TT	99 (6)	92 (6)	7 (10)	
Caucasian				<0.001
GG	4272 (61)	4062 (62)	210 (58)	
GT	2352 (34)	2235 (34)	117 32)	
TT	317 (5)	279 (4)	38 (10)	

	Total	***No***	***Yes***	***p-value***
	n (%)[†]	*n (%)*	*n (%)*	
Genetic Risk (*CFH* rs1061170 C + *ARMS2* rs10490924 T)				
African-American				0.52
Missing Data (n)	174	169	5	
0 alleles	322 (22)	311 (22)	11 (18)	
1 alleles	650 (43)	624 (43)	26 (41)	
≥2 alleles	525 (35)	499 (35)	26 (41)	
Caucasian				<0.001
0 alleles	1754 (25)	1689 (26)	65 (18)	
1 alleles	2947 (43)	2806 (43)	141 (39)	
≥2 alleles	2240 (32)	2081 (31)	159 (43)	

[*]Data are presented as number (percentage) unless otherwise noted; n=10,295 for dietary analyses; n=8,612 for genetic analyses
[†]Column percentages may not sum to 100% due to rounding
[‡]Adjusted household income = Household income/(Household size)$^{0.5}$

Supplemental Table 2: Prevalence of early AMD, soft drusen, and RPE depigmentation by quintiles of energy-adjusted xanthophyll intake, visit 3 (n=10,021).

Association	Outcome n/ Total n[┼]	Model I (Unadjusted)		Model II (Age-adjusted)		Model III (Multivariable-adjusted)[*]		Model IV (Multivariable-adjusted)	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Early AMD									
Overall									
Q1 (258-440)[†]	94/2004	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (597-756)	108/2004	1.16	0.87-1.54	1.13	0.85-1.51	1.13	0.85-1.51	1.16	0.87-1.55
Q3 (917-1096)	111/2005	1.19	0.90-1.58	1.15	0.87-1.53	1.14	0.86-1.52	1.18	0.88-1.57
Q4 (1316-1646)	98/2004	1.05	0.78-1.40	1.02	0.76-1.36	1.02	0.76-1.37	1.07	0.79-1.44
Q5 (2202-3504)	107/2004	1.15	0.86-1.52	1.09	0.82-1.44	1.13	0.83-1.52	1.17	0.87-1.56
	***p* for trend[‡]**		0.66		0.94		0.71		0.55
African-American									
Q1 (286-454)[†]	6/108	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (608-768)	9/239	0.67	0.23-1.92	0.65	0.23-1.89	0.66	0.23-1.91	0.67	0.23-1.94
Q3 (923-1113)	13/299	0.77	0.29-2.09	0.74	0.27-2.00	0.74	0.27-2.03	0.75	0.27-2.05
Q4 (1329-1661)	15/493	0.53	0.20-1.41	0.52	0.20-1.36	0.52	0.19-1.37	0.53	0.20-1.40
Q5 (2266-3793)	31/759	0.72	0.30-1.78	0.67	0.27-1.66	0.68	0.27-1.69	0.69	0.28-1.74
	***p* for trend**		0.95		0.81		0.81		0.86
Caucasian									
Q1 (256-440)[†]	88/1896	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (595-755)	99/1765	1.22	0.91-1.64	1.18	0.88-1.59	1.17	0.87-1.57	1.20	0.89-1.61
Q3 (916-1095)	98/1706	1.25	0.93-1.68	1.20	0.89-1.62	1.16	0.86-1.57	1.20	0.89-1.62
Q4 (1310-1640)	83/1511	1.19	0.88-1.62	1.14	0.83-1.55	1.09	0.79-1.49	1.14	0.83-1.56
Q5 (2167-3344)	76/1245	1.34	0.97-1.83	1.23	0.89-1.69	1.16	0.84-1.61	1.22	0.88-1.69
	***p* for trend**		0.14		0.35		0.59		0.42
Soft Drusen									
Overall									
Q1	81/2004	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	86/2004	1.06	0.78-1.45	1.04	0.76-1.42	1.03	0.76-1.41	1.06	0.77-1.45
Q3	94/2005	1.17	0.86-1.58	1.13	0.84-1.54	1.10	0.81-1.50	1.13	0.83-1.54
Q4	86/2004	1.06	0.78-1.45	1.04	0.76-1.41	1.01	0.74-1.39	1.05	0.76-1.45
Q5	91/2004	1.13	0.83-1.53	1.07	0.79-1.46	1.06	0.77-1.46	1.10	0.79-1.52
	***p* for trend**		0.55		0.79		0.83		0.70
African-American									
Q1	6/108	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	8/239	0.59	0.20-1.74	0.58	0.20-1.71	0.59	0.20-1.75	0.59	0.20-1.75
Q3	10/299	0.59	0.21-1.66	0.56	0.20-1.59	0.57	0.20-1.64	0.56	0.20-1.61
Q4	14/493	0.50	0.19-1.32	0.48	0.18-1.28	0.49	0.18-1.31	0.48	0.18-1.30
Q5	30/759	0.70	0.28-1.72	0.65	0.26-1.61	0.66	0.27-1.66	0.66	0.26-1.65
	***p* for trend**		0.77		0.90		0.87		0.88
Caucasian									
Q1	75/1896	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	78/1765	1.12	0.81-1.55	1.09	0.79-1.51	1.07	0.77-1.48	1.10	0.79-1.53
Q3	84/1706	1.26	0.91-1.73	1.21	0.88-1.67	1.15	0.83-1.59	1.19	0.86-1.65
Q4	72/1511	1.22	0.87-1.69	1.16	0.83-1.61	1.09	0.78-1.52	1.14	0.81-1.60
Q5	61/1245	1.25	0.89-1.77	1.15	0.81-1.63	1.06	0.75-1.52	1.11	0.78-1.59
	***p* for trend**		0.23		0.48		0.85		0.68
RPE Depigmentation									
Overall									
Q1	23/2004	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	25/2004	1.09	0.62-1.92	1.06	0.60-1.88	1.12	0.63-1.99	1.17	0.66-2.07
Q3	22/2005	0.96	0.53-1.72	0.93	0.51-1.67	1.04	0.57-1.88	1.09	0.60-1.98
Q4	18/2004	0.78	0.42-1.45	0.76	0.41-1.41	0.92	0.49-1.73	0.99	0.52-1.86

Q5	24/2004	1.04	0.59-1.86	0.99	0.55-1.76	1.38	0.76-2.52	1.49	0.81-2.73
	***p* for trend**		0.94		0.80		0.34		0.24
African-American									
Q1	0/108	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	1/239	-	-	-	-	-	-	-	-
Q3	3/299	-	-	-	-	-	-	-	-
Q4	2/493	-	-	-	-	-	-	-	-
Q5	1/759	-	-	-	-	-	-	-	-
	***p* for trend**		-		-		-		-
Caucasian									
Q1	23/1896	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	24/1765	1.12	0.63-2.00	1.09	0.61-1.94	1.10	0.62-1.96	1.13	0.63-2.01
Q3	19/1706	0.92	0.50-1.69	0.88	0.48-1.63	0.93	0.50-1.72	0.96	0.52-1.79
Q4	16/1511	0.87	0.46-1.66	0.83	0.44-1.58	0.88	0.46-1.69	0.92	0.48-1.78
Q5	23/1245	1.53	0.86-2.74	1.41	0.79-2.53	1.54	0.84-2.80	1.63	0.89-2.98
	***p* for trend**		0.18		0.28		0.17		0.12

[*]Model III: adjusted for age, race field center, and visit 3 daily caloric intake
Model IV: adjusted for age, sex, race, pack-years of smoking, field center, and visit 1 daily caloric intake
[†]Quintiles and interquartile range (µg/1000 kcal) of energy-adjusted daily xanthophyll intake at visit 3
[‡]Reflects distribution of unadjusted model; data was missing for pack-years of smoking in multivariable-adjusted model
[‡]p-value for linear trend was calculated using quintile medians

Supplemental Table 3: Prevalence of early AMD, soft drusen, and RPE depigmentation by quintiles of energy-adjusted xanthophyll intake, average of visit 1 and visit 3 (n=10,021).

Association	Outcome n/ Total n[┼]	Model I (Unadjusted)		Model II (Age-adjusted)		Model III (Multivariable-adjusted)[*]		Model IV (Multivariable-adjusted)[*]	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Early AMD									
Overall									
Q1 (314-538)[†]	90/2004	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (717-891)	113/2004	1.27	0.96-1.69	1.25	0.94-1.67	1.24	0.93-1.65	1.26	0.95-1.68
Q3 (1075-1267)	112/2005	1.26	0.95-1.67	1.22	0.92-1.62	1.21	0.90-1.61	1.24	0.93-1.66
Q4 (1531-1913)	106/2004	1.19	0.89-1.58	1.16	0.87-1.54	1.17	0.86-1.58	1.21	0.89-1.64
Q5 (2510-3757)	97/2004	1.08	0.81-1.45	1.01	0.75-1.36	1.04	0.76-1.42	1.08	0.79-1.48
	***p* for trend**[‡]		0.84		0.50		0.66		0.84
African-American									
Q1 (356-591)[†]	2/49	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (751-916)	7/166	1.04	0.21-5.15	1.05	0.21-5.23	1.04	0.21-5.22	1.02	0.20-5.13
Q3 (1108-1297)	13/311	1.03	0.22-4.69	1.03	0.22-4.70	1.03	0.22-4.74	1.02	0.22-4.71
Q4 (1555-1956)	26/586	1.09	0.25-4.74	1.06	0.24-4.63	1.06	0.24-4.65	1.05	0.24-4.63
Q5 (2544-3870)	26/786	0.80	0.19-3.49	0.76	0.17-3.29	0.77	0.18-3.40	0.77	0.17-3.38
	***p* for trend**		0.34		0.24		0.28		0.28
Caucasian									
Q1 (314-535)[†]	88/1955	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (713-889)	106/1838	1.30	0.97-1.74	1.27	0.95-1.70	1.24	0.92-1.66	1.26	0.94-1.69
Q3 (1072-1260)	99/1694	1.32	0.98-1.77	1.25	0.93-1.68	1.20	0.89-1.62	1.24	0.91-1.67
Q4 (1525-1894)	80/1418	1.27	0.93-1.73	1.20	0.88-1.64	1.13	0.82-1.55	1.17	0.85-1.62
Q5 (2480-3676)	71/1218	1.31	0.95-1.81	1.18	0.85-1.63	1.10	0.79-1.53	1.15	0.82-1.61
	***p* for trend**		0.21		0.59		0.98		0.78
Soft Drusen									
Overall									
Q1	74/2004	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	95/2004	1.30	0.95-1.77	1.28	0.94-1.75	1.25	0.92-1.71	1.27	0.93-1.74
Q3	92/2005	1.25	0.92-1.71	1.22	0.89-1.67	1.18	0.86-1.62	1.21	0.88-1.66
Q4	92/2004	1.26	0.92-1.72	1.22	0.89-1.67	1.19	0.86-1.65	1.22	0.88-1.70
Q5	85/2004	1.16	0.84-1.59	1.08	0.79-1.49	1.06	0.75-1.49	1.09	0.78-1.54
	***p* for trend**		0.78		0.88		0.79		0.91
African-American									
Q1	2/49	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	6/166	0.88	0.17-4.51	0.89	0.17-4.58	0.88	0.17-4.56	0.86	0.17-4.46
Q3	11/311	0.86	0.19-4.01	0.86	0.19-4.02	0.86	0.18-4.04	0.84	0.18-3.96
Q4	25/586	1.05	0.24-4.56	1.02	0.23-4.45	1.01	0.23-4.45	0.98	0.22-4.33
Q5	24/786	0.74	0.17-3.23	0.70	0.16-3.04	0.71	0.16-3.13	0.69	0.16-3.05
	***p* for trend**		0.43		0.31		0.36		0.34
Caucasian									
Q1	72/1955	1.00	referent	1.00	referent	1.00	referent	1.00	Referent
Q2	89/1838	1.33	0.97-1.83	1.30	0.94-1.79	1.26	0.92-1.74	1.28	0.93-1.77
Q3	81/1694	1.31	0.95-1.82	1.25	0.90-1.73	1.18	0.85-1.64	1.22	0.88-1.70
Q4	67/1418	1.30	0.92-1.82	1.23	0.87-1.73	1.13	0.80-1.61	1.18	0.83-1.67
Q5	61/1218	1.38	0.97-1.95	1.24	0.87-1.76	1.13	0.79-1.62	1.18	0.82-1.70
	***p* for trend**		0.16		0.44		0.89		0.72
RPE Depigmentation									
Overall									
Q1	23/2004	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	24/2004	1.04	0.59-1.86	1.03	0.58-1.83	1.09	0.61-1.94	1.13	0.63-2.02
Q3	26/2005	1.13	0.64-1.99	1.10	0.62-1.93	1.25	0.71-2.23	1.31	0.74-2.34
Q4	22/2004	0.96	0.53-1.72	0.93	0.52-1.67	1.21	0.66-2.23	1.29	0.70-2.38

Q5	17/2004	0.74	0.39-1.38	0.69	0.37-1.29	0.99	0.51-1.92	1.07	0.55-2.09
	***p* for trend**		0.24		0.16		0.92		0.90
African-American									
Q1	0/49	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	1/166	-	-	-	-	-	-	-	-
Q3	2/311	-	-	-	-	-	-	-	-
Q4	2/586	-	-	-	-	-	-	-	-
Q5	2/786	-	-	-	-	-	-	-	-
	***p* for trend**		-		-		-		-
Caucasian									
Q1	23/1955	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	23/1838	1.06	0.60-1.90	1.04	0.58-1.86	1.06	0.59-1.90	1.09	0.61-1.96
Q3	24/1694	1.21	0.68-2.15	1.15	0.64-2.04	1.20	0.67-2.15	1.24	0.69-2.23
Q4	20/1418	1.20	0.66-2.20	1.14	0.62-2.08	1.21	0.65-2.26	1.28	0.69-2.39
Q5	15/1218	1.05	0.54-2.02	0.94	0.49-1.82	1.02	0.52-2.01	1.09	0.55-2.16
	***p* for trend**		0.86		0.87		0.93		0.78

[*]Model III: adjusted for age, race, field center, and average of visit 1 and visit 3 daily caloric intake
Model IV: adjusted for age, sex, race, pack-years of smoking, field center, and average of visit 1 and visit 3 daily caloric intake
[†]Quintiles and interquartile range (µg/1000 kcal) of energy-adjusted daily xanthophyll intake (average of visit 1 and visit 3)
[┼]Reflects distribution of unadjusted model; data was missing for pack-years of smoking in multivariable-adjusted model
[‡]p-value for linear trend was calculated using quintile medians

Supplemental Table 4: Prevalence of early AMD, soft drusen, and RPE depigmentation by quintiles of visit 1 energy-adjusted xanthophyll intake, among participants exhibiting ≤1 quintile change in xanthophyll intake at visit 3 (n=7,344).

Association	Outcome n/ Total n[┼]	Model I (Unadjusted)		Model II (Age-adjusted)		Model III (Multivariable-adjusted)[*]		Model IV (Multivariable-adjusted)[*]	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Early AMD									
Overall									
Q1 (236-437)[†]	69/1532	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (653-859)	78/1471	1.19	0.85-1.66	1.17	0.84-1.63	1.14	0.81-1.59	1.15	0.82-1.61
Q3 (1083-1306)	77/1415	1.22	0.87-1.70	1.20	0.86-1.67	1.19	0.85-1.68	1.22	0.87-1.72
Q4 (1594-2041)	81/1557	1.16	0.84-1.62	1.13	0.81-1.57	1.18	0.83-1.67	1.21	0.85-1.73
Q5 (2944-5092)	65/1369	1.06	0.75-1.50	0.98	0.69-1.39	1.03	0.71-1.50	1.06	0.73-1.55
	***p* for trend**[‡]		0.88		0.55		0.80		0.89
African-American									
Q1 (163-473)[†]	1/27	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (668-882)	6/90	1.86	0.21-16.14	1.86	0.21-16.14	1.79	0.21-15.61	1.77	0.20-15.56
Q3 (1117-1307)	7/208	0.91	0.11-7.66	0.91	0.11-7.65	0.91	0.11-7.76	0.93	0.11-7.94
Q4 (1619-2063)	14/475	0.79	0.10-6.24	0.79	0.10-6.25	0.85	0.11-6.84	0.89	0.11-7.15
Q5 (2954-5093)	23/556	1.12	0.15-8.63	1.13	0.15-8.67	1.19	0.15-9.30	1.23	0.16-9.67
	***p* for trend**		0.83		0.82		0.72		0.68
Caucasian									
Q1 (237-437)[†]	68/1505	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2 (652-857)	72/1381	1.16	0.83-1.63	1.13	0.80-1.59	1.09	0.78-1.54	1.11	0.78-1.56
Q3 (1078-1306)	70/1207	1.30	0.92-1.83	1.25	0.89-1.76	1.20	0.85-1.71	1.23	0.86-1.74
Q4 (1581-2034)	67/1082	1.40	0.99-1.97	1.30	0.92-1.85	1.24	0.87-1.78	1.27	0.88-1.84
Q5 (2939-5092)	42/813	1.15	0.78-1.71	1.02	0.68-1.52	0.94	0.62-1.42	0.97	0.64-1.47
	***p* for trend**		0.50		0.99		0.65		0.73
Soft Drusen									
Overall									
Q1	55/1532	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	67/1471	1.28	0.89-1.84	1.26	0.88-1.82	1.23	0.85-1.77	1.23	0.85-1.78
Q3	67/1415	1.34	0.93-1.92	1.31	0.91-1.89	1.29	0.89-1.87	1.31	0.90-1.91
Q4	68/1557	1.23	0.85-1.76	1.19	0.83-1.71	1.21	0.82-1.78	1.23	0.84-1.82
Q5	59/1369	1.21	0.83-1.76	1.13	0.78-1.65	1.15	0.77-1.73	1.17	0.78-1.77
	***p* for trend**		0.68		0.98		0.89		0.84
African-American									
Q1	1/27	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	5/90	1.83	0.17-13.69	1.53	0.17-13.68	1.47	0.16-13.18	1.43	0.16-12.88
Q3	7/208	0.91	0.11-7.66	0.91	0.11-7.65	0.88	0.10-7.48	0.86	0.10-7.35
Q4	11/475	0.62	0.08-4.96	0.62	0.08-4.97	0.62	0.08-5.04	0.61	0.08-5.03
Q5	22/556	1.07	0.14-8.26	1.08	0.14-8.33	1.07	0.14-8.35	1.06	0.14-8.32
	***p* for trend**		0.62		0.60		0.57		0.55
Caucasian									
Q1	54/1505	1.00	referent	1.00	referent	1.00	referent	1.00	Referent
Q2	62/1381	1.26	0.87-1.83	1.23	0.85-1.79	1.19	0.82-1.73	1.20	0.83-1.74
Q3	60/1207	1.41	0.97-2.05	1.35	0.93-1.97	1.29	0.88-1.90	1.32	0.90-1.94
Q4	57/1082	1.49	1.02-2.19	1.40	0.95-2.05	1.32	0.89-1.96	1.35	0.90-2.01
Q5	37/813	1.28	0.84-1.96	1.14	0.74-1.75	1.04	0.67-1.63	1.06	0.68-1.67
	***p* for trend**		0.32		0.71		0.90		0.95
RPE Depigmentation									
Overall									
Q1	17/1532	1.00	referent	1.00	referent	1.00	referent	1.00	referent

Q2	19/1471	1.17	0.60-2.25	1.14	0.59-2.21	1.20	0.62-2.32	1.25	0.64-2.42
Q3	14/1415	0.89	0.44-1.81	0.87	0.43-1.78	1.01	0.49-2.09	1.08	0.52-2.23
Q4	15/1557	0.87	0.43-1.74	0.84	0.42-1.69	1.14	0.54-2.38	1.23	0.59-2.60
Q5	10/1369	0.66	0.30-1.44	0.61	0.28-1.33	0.89	0.38-2.05	0.97	0.41-2.26
	***p* for trend**		0.18		0.12		0.66		0.80
African-American									
Q1	0/27	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	1/90	-	-	-	-	-	-	-	-
Q3	1/208	-	-	-	-	-	-	-	-
Q4	3/475	-	-	-	-	-	-	-	-
Q5	1/556	-	-	-	-	-	-	-	-
	***p* for trend**		-		-		-		-
Caucasian									
Q1	17/1505	1.00	referent	1.00	referent	1.00	referent	1.00	referent
Q2	18/1381	1.16	0.59-2.25	1.13	0.58-2.19	1.16	0.59-2.27	1.20	0.61-2.34
Q3	13/1207	0.95	0.46-1.97	0.92	0.44-1.89	0.97	0.47-2.03	1.02	0.48-2.13
Q4	12/1082	0.98	0.47-2.06	0.92	0.44-1.93	1.01	0.47-2.18	1.07	0.49-2.33
Q5	9/813	0.98	0.44-2.21	0.87	0.39-1.97	0.98	0.42-2.29	1.05	0.45-2.48
	***p* for trend**		0.84		0.62		0.85		0.98

[*]Model III: adjusted for age, race, field center, and visit 1 daily caloric intake
Model IV: adjusted for age, sex, race, pack-years of smoking, field center, and visit 1 daily caloric intake
[†]Quintiles and interquartile range (µg/1000 kcal) of energy-adjusted daily xanthophyll intake at visit 1
[┼]Reflects distribution of unadjusted model; data was missing for pack-years of smoking in multivariable-adjusted model
[‡]p-value for linear trend was calculated using quintile medians

Supplemental Table 5: Associations of *CFH* rs1061170 and *ARMS2* 10490924 genotype with prevalent early AMD.

	Outcome n/Total n	Multivariable-adjusted OR (95% CI)*
		Early AMD
***CFH* rs1061170**		
African-Americans		
CC (2 risk alleles)	12/179	referent
CT (1 risk allele)	28/772	0.53 (0.26-1.06)
TT (0 risk alleles)	23/552	0.64 (0.31-1.32)
Caucasians		
CC (2 risk alleles)	82/904	referent
CT (1 risk allele)	170/3131	0.59 (0.45-0.78)
TT (0 risk alleles)	113/2906	0.41 (0.31-0.55)
***ARMS2* rs10490924**		
African-Americans		
TT (2 risk alleles)	7/99	referent
GT (1 risk allele)	20/583	0.47 (0.19-1.15)
GG (0 risk alleles)	41/983	0.58 (0.25-1.33)
Caucasians		
TT (2 risk alleles)	38/317	referent
GT (1 risk allele)	117/2352	0.38 (0.26-0.56)
GG (0 risk alleles)	210/4272	0.37 (0.25-0.53)
Combined genetic risk (*CFH* rs1061170 C and *ARMS2* rs10490924 T)		
African-Americans		
≥2 risk alleles	26/525	referent
1 risk allele	26/650	0.81 (0.46-1.41)
0 risk alleles	11/322	0.71 (0.34-1.45)
Caucasians		
≥2 risk alleles	159/2240	referent
1 risk allele	141/2947	0.66 (0.52-0.83)
0 risk alleles	65/1754	0.49 (0.37-0.67)

*Adjusted for age, sex, race, pack-years of smoking, field center, and visit 1 daily caloric intake,
†Association between genotype (treated as a categorical variable) and early AMD.