

**Table 4a.** Joint Effects of AMD Genotype (based on *CFH* or *ARMS2*) and Dietary Lutein and Zeaxanthin (LZ) Intake in Association with Odds for AMD in overall sample

Genotype	No. with AMD/Total No. in Group	High LZ Intake ≥2000 mcg/day (n=827) OR* (95% CI)	Low LZ Intake <2000 mcg/day (n=836) OR* (95% CI)	P-value for trend	P-value for Multiplicative Interaction	Synergy Index (95% CI)
<i>CFH</i> (rs1061170)						
TT	92/606	1 [Reference]	1.10 (0.70, 1.72)	0.7		1.08
TC	163/791	1.46 (0.98, 2.19)	1.42 (0.95, 2.13)	0.83	0.91	(0.55, 2.11)
CC	82/266	2.34 (1.41, 3.87)	2.71 (1.66, 4.41)	0.39		
<i>ARMS2</i> (rs10490924)						
CC	179/1017	1 [Reference]	0.96 (0.69, 1.33)	0.81		1.44
AC/AA	158/643	1.44 (1.01, 2.04)	1.65 (1.17, 2.32)	0.49	0.47	(0.67, 3.12)
<i>ARMS2</i> (rs10490924)						
CC	179/1017	1 [Reference]	0.96 (0.69, 1.33)	0.81		1.22
AC	136/575	1.32 (0.91, 1.91)	1.63 (1.15, 2.32)	0.29	0.72	(0.53, 2.82)
AA	22/68	2.48 (1.18, 5.24)	1.79 (0.79, 4.06)	0.46		
<i>CFB/C2</i> (rs641153)						
AA/AG	44/278	1 [Reference]	0.69 (0.36, 1.35)	0.24		1.85
GG	293/1385	1.21 (0.75, 1.95)	1.37 (0.85, 2.20)	0.35	0.18	(1.03, 3.33)
<i>CFI</i> (rs10033900)						
GG	92/430	1 [Reference]	1.58 (0.97, 2.55)	0.05		0.12
GA	148/835	1.13 (0.72, 1.75)	0.96 (0.61, 1.51)	0.37	0.16	(2.7E-5, 535.7)
AA	97/397	1.55 (0.95, 2.55)	1.56 (0.95, 2.56)	0.95		
<i>C3</i> (rs2230199)						
CC	17/69	1 [Reference]	2.39 (0.72, 7.91)	0.15		0.13
GC	105/540	1.30 (0.47, 3.60)	1.34 (0.48, 3.73)	0.79	0.34	(1.9E-4, 89.0)
GG	214/1053	1.34 (0.49, 3.61)	1.35 (0.50, 3.66)	0.95		

\* Adjusted for age (further adjustment for eye color, smoking, and hormone therapy did not alter ORs)

**Table 4b.** Joint Effects of AMD Genotype and Dietary Lutein and Zeaxanthin (LZ) Intake in Association with Odds for AMD among diet stable individuals

Genotype	No. with AMD/Total No. in Group	High LZ Intake	Low LZ Intake	P-value for trend	P-value for Multiplicative Interaction	Synergy Index (95% CI)
		≥2000 mcg/day (n=358) OR* (95% CI)	<2000 mcg/day (n=370) OR* (95% CI)			
<i>CFH</i> (rs1061170)						
TT	34/275	1 [Reference]	1.59 (0.76, 3.31)	0.22	0.63	1.49
TC	58/339	1.95 (0.98, 3.89)	1.78 (0.90, 3.54)	0.74		(0.65, 3.42)
CC	28/114	1.81 (0.74, 4.42)	4.37 (1.97, 9.68)	0.06		
<i>ARMS2</i> (rs10490924)						
CC	70/457	1 [Reference]	1.51 (0.90, 2.54)	0.11	0.39	0.27
AC/AA	50/269	1.57 (0.86, 2.87)	1.67 (0.94, 2.96)	0.9		(3.3E-4, 222.8)
<i>CFB/C2</i> (rs641153)						
AA/AG	12/116	1 [Reference]	1.55 (0.46, 5.29)	0.57	0.78	0.98
GG	108/612	2.14 (0.80, 5.71)	2.77 (1.05, 7.33)	0.23		(0.15, 6.32)
<i>CFI</i> (rs10033900)						
GG	34/199	1 [Reference]	1.54 (0.73, 3.27)	0.25	0.37	0.52
GA	47/361	0.73 (0.35, 1.52)	1.09 (0.55, 2.17)	0.2		(0.08, 3.65)
AA	39/168	1.83 (0.85, 3.94)	1.74 (0.82, 3.68)	0.94		
<i>C3</i> (rs2230199)						
CC	29-Sep	1 [Reference]	3.60 (0.59, 22.05)	0.17	0.97	1.01
GC	32/237	0.97 (0.19, 4.85)	0.80 (0.16, 4.03)	0.68		(0.02, 57.10)
GG	79/462	0.91 (0.19, 4.37)	1.33 (0.28, 6.36)	0.14		

\* Adjusted for age (further adjustment for eye color, smoking, and hormone therapy did not alter ORs)