

H.2 Risk factors

H.2.1 Risk factors for development or progression of AMD

RQ2: What risk factors increase the likelihood of a person developing AMD or progressing to late AMD?

Demographic and medical risk factors

Studies	Sample size	Risk of bias	Inconsistency	Indirectness	Imprecision	Effect measure	Effect size	Quality
Low dose aspirin								
Christen (2001) Prospective cohort	22,071	Very serious ^{1,2,3}	N/A	Not serious	Serious ⁵	HR (95% CI)	0.77 (0.54, 1.11)	VERY LOW
Low dose aspirin								
Christen (2009) Prospective cohort	39,876	Very serious ^{1,2,3}	N/A	Not serious	Not serious	HR (95% CI)	1.03 (0.88, 1.21)	LOW
Ethnicity (risk of non-exudative AMD) – white as reference category								
van der Beek (2011) Prospective cohort	1,772,962	Very serious ^{1,2,3,4}	N/A	Not serious	Not serious	HR (95% CI)	Black - age 60: 0.75 (0.71, 0.79) Black - age 80: 0.56 (0.52, 0.60) Latino - age 60: 0.99 (0.94, 1.04) Latino - age 80:	LOW

Macular Degeneration
Appendix H: Grade tables and meta-analysis results

Studies	Sample size	Risk of bias	Inconsistency	Indirectness	Imprecision	Effect measure	Effect size	Quality
							0.82 (0.76, 0.88) Asian American - age 60: 1.28 (1.20, 1.36) Asian American - age 80 0.92 (0.83, 1.02)	
Stein (2011) Prospective cohort	44,103	Very serious ^{1,2,3,4}	N/A	Not serious	Not serious	HR (95% CI)	Vietnamese: 1.15 (0.96, 1.38) Japanese: 0.71 (0.59, 0.85) Chinese: 1.63 (1.50, 1.77) Filipino: 0.96 (0.76, 1.22) Korean: 1.11 (0.92, 1.34) Indian: 0.99 (0.85, 1.16) Pakistani: 1.97 (1.40, 2.77)	LOW
Exercise (km/day)								
Williams 2009 Prospective cohort	41,708	Very serious ^{1,2,3,4}	N/A	Not serious	Not serious	HR (95% CI)	0.90 (0.83, 0.97)	LOW
Cardiorespiratory fitness (10-k performance times) (m/s)								

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Williams 2009 Prospective cohort	41,708	Very serious ^{1,2,3,4}	N/A	Not serious	Serious ⁵	HR (95% CI)	0.92 (0.60, 1.39)	VERY LOW
1. Evidence of bias from sample selection 2. Evidence of bias from study attrition 3. Evidence of bias from outcome measurement 4. Evidence of bias from prognostic factor measurement 5. Downgraded one level for non-significant effect								

Diet and nutrition

Studies	Sample size	Risk of bias	Inconsistency	Indirectness	Imprecision	Effect measure	Effect size	Quality
Alcohol (<1drink/week as reference category)								
Ajani (1999) Prospective cohort	21,041	Very serious ^{1,2}	N/A	Not serious	Serious ³	HR (95% CI)	1 drink/week: 0.92 (0.65, 1.30) 2-4 drinks/week: 0.70 (0.51, 0.97) 5-6 drinks/week: 1.25 (0.92, 1.71) ≥1 drink/day: 1.23 (0.96, 1.57)	VERY LOW
Alpha carotene, per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	0.99 (0.94, 1.06)	LOW
Beta carotene, per standard deviation increase								
Leeuwen	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	1.00 (0.94, 1.06)	LOW

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(2005) Prospective cohort								
Beta cryptoxanthin, per standard deviation increase								
Leeuwen (2005) Prospective cohort	Participants of the Rotterdam study (2005)	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	1.01 (0.92, 1.10)	LOW
Lutein/zeaxanthin, per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	1.01 (0.93, 1.09)	LOW
Lycopene, per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	1.01 (0.97, 1.04)	LOW
Vitamin A (retinol equivalents), per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	0.95 (0.86, 1.05)	LOW
Vitamin C, per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	1.02 (0.94, 1.10)	LOW
Vitamin E, per standard deviation increase								

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Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Not serious	HR (95% CI)	0.92 (0.84, 1.00)	MODERATE
Trace elements Iron, per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Serious ³	HR (95% CI)	0.95 (0.86, 1.04)	LOW
Zinc, per standard deviation increase								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Not serious	HR (95% CI)	0.91 (0.83, 0.98)	MODERATE
Combined intake of 4 predefined antioxidant nutrients (vitamins C and E, beta carotene, and zinc) – medium intake as reference category								
Leeuwen (2005) Prospective cohort	4,170	Serious ¹	N/A	Not serious	Not serious	HR (95% CI)	Low: 1.20 (0.92, 1.56) High: 0.65 (0.46, 0.92)	MODERATE
<ol style="list-style-type: none"> 1. Downgraded one level for risk of bias due to the study attrition (for example, the paper is not clear about how many people were lost to follow up in the study and/or had missing data, there was no meaningful comparison between those lost to follow up or with missing data in the study and the rest of the included sample) 2. Downgraded one level for risk of bias due to the outcome measurement (for example, the paper is not clear about how the outcome was measured and what investigations were used, there appears to be no masking or confirmation with multiple readers, outcomes were taken from healthcare database codes where there is likely to be inconsistency in measurement or definition) Downgraded one level for non-significant effect 3. Downgraded one level for non-significant effect 								